Lectures
ON
THE SURGICAL TREATMENT OF ANEURISM
IN ITS VARIOUS FORMS.

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LECTURE III.—PART I.

INGUINAL AND FEMORAL ANEURISM—(CONTINUED.)

GENTLEMEN,—I will resume the subject of inguinal and femoral aneurism where I broke off the other day. I have shown that the experience of our British hospitals has been, on the whole, favourable in the treatment of this form of aneurism by cutting operations, whether in unruptured aneurisms, after the method of Hunter, applied to the external iliac artery or the femoral, or in ruptured aneurisms, by tying both ends of the vessel, after the method of Antyllus; whilst the experience of pressure, so far as it has gone, has been less favourable, and offers a very great contrast to the account given by Fischer of the cases to be found in published literature.

Two causes may be imagined for this contrast. It may either be assumed (for we have no proof either way) that our hospital patients are less tolerant of pressure or that their cases are less fitted for the treatment than those in general practice. And there is no doubt that many of our patients are irritable from drunkenness, and that in many cases they have neglected to take advice till the growth of the tumour has rendered it little amenable to compression.

But it is also possible that the method of compression may not be followed out in our hospitals with that minute care and that attention to every detail of the case which are really essential to its successful application. The treatment has not a fair chance if carried on by persons who are not responsible for its success, and who may be hardly interested in the event of the case, with just a hasty visit once or twice a day from the superintending surgeon. The compression treatment is far more laborious for the surgeon in charge of the case than the operative treatment; and I confess to a suspicion that, if hospital practice is to be carried on only by daily visits, the treatment of cases of aneurism in the lower extremity will be more successfully conducted on the Hunterian method than on that which is intended to replace it. At the same time, this accidental circumstance affords no indication of the real value of the two methods of treatment.

My own opinion, derived from an extensive search into the published records of practice and from a tolerably long experience of the results of treatment in our hospitals, is that the treatment of aneurism by operation in the latter is, on the whole, eminently successful. At the same time, I believe that this success might be even further extended if the treatment by compression, and particularly by digital pressure, were more completely and more systematically carried out than it is at present, and if hospital surgeons had sufficient confidence and sufficient interest in the method to sacrifice to it the time and attention which are necessary in order to obtain from it the best results which it is capable of giving.

I am speaking before an audience composed in great part of hospital surgeons, and they can judge whether what I say has any likelihood or importance.

Another striking fact in this table is the sharp contrast which it shows between the results of rapid and total pressure under chloroform, which as a rule has been very successful, and those of the more gradual method by instrumental or digital pressure, which, in femoral aneurism at any rate, has been very much the reverse of successful in the hands of British hospital surgeons; and this will, I think, be a convenient place to exhibit, as far as present experience enables me to do so, the results which have actually been obtained by this novel method, not only in femoral but in other forms of aneurism below the diaphragm to which it has been applied.

The very successful case of abdominal aneurism which Dr. Murray published some years ago, where a cure was effected by rapid compression of the abdominal aorta under chloroform, was such a real advance in the cure of a disease previously regarded as inevitably fatal, that it has led to very general imitation, and numerous similar cases have been recorded. Some surgeons have gone so far as to recommend this method of rapid pressure under chloroform applied to one of the large abdominal trunks, as superior to the more gradual method applied to the femoral artery in the groin, for the cure of femoral and popliteal aneurisms. No doubt the circulation in the thigh and leg may be powerfully, even alarmingly, affected by compression of the aorta or common iliac. This is attested by the coldness and lividity of the lower extremities which have been noticed during such compression, and which have persisted for a length of time that rendered gangrene very probable.*

We are not, I think, as yet in a position to give any other than a conjectural opinion as to the desirability and the chances of success of the rapid method of pressure, applied under anæsthesia, in situations like the popliteal, where the other plans are feasible. Very few cases, indeed, have occurred in which this method has been applied to the femoral artery for the cure of popliteal aneurism; and that for the very satisfactory reason that patients can usually tolerate effectual pressure on the femoral without chloroform. But, in cases of femoral aneurism, it is often necessary, if compression is used at all, that it should be used in the form of the rapid and total compression of the external iliac, under chloroform or ether, since the patient cannot bear the amount of force required without an anæsthetic; and it is one of the most interesting and most difficult questions in the surgery of such aneurisms to determine whether this treatment is really more or less dangerous than the resort to the Hunterian operation on the external iliac artery. The number of cases which have as yet been under treatment cannot be large; and, perhaps, I have not succeeded in finding all those that have been published. It is a singular fact that all these cases are either English or American. Some cases I should have thought must have occurred on the Continent; but, if they have been recorded, I have missed them. But I will endeavour in this place to put on record those which I have met with in books, or which have been kindly communicated to me from the various hospitals, in order to exhibit, as far as I can, a correct picture of the benefits and the risks connected with this treatment. It is evident enough, from the way in which "the rapid method" is sometimes spoken of, that the few striking cases of cure which have been published have attracted more attention than the instances of failure, although great candour has been shown in putting these on record, so far as they have been deemed worthy of publication. I have previously called attention to the risks which attend the rapid method of pressure applied to the abdominal aorta—risks which, as I before explained, do not justify the surgeon in refusing to his patient the prospect of cure which this operation holds out, and which very probably are not greater than those which are inseparable from all grave surgical operations; but those risks certainly ought to be clearly known to any surgeon who proposes to undertake the operation, and deliberately weighed by him against the apparent dangers of the disease, and against the risks of any other method by which it may be treated.

I have therefore to call your attention to this table, which comprises twenty-three cases in which rapid pressure has been applied with a view of curing the aneurism at a single sitting—an attempt which in many of them has been repeated at subsequent sittings with varying success. In six of these the aneurism was, or was supposed to be, aortic. (In Mr. Pollock's case it was mesenteric, extending up to the aorta.) The fact was ascertained in four by post-mortem examination, and in the others was inferred by more or less certain proof. Of these, three were successful, two were fatal, and in the sixth case the attempt failed, though it was fortunately abandoned before fatal injury had been inflicted,

* See Dr. Greenhow's and Mr. Hulke's case in the 56th volume of the Medico-Chirurgical Transactions, and Mr. Wheelhouse's case recently read at the Clinical Society.

and the man died from the gradual progress of the disease. In ten the aneurism was iliac, or ilio-femoral; and in seven of these a cure was obtained. In the other three the attempt failed, but was not fatal; though in every one death ensued after the ligature, which in one was applied to the abdominal aorta. In five the aneurism was femoral, and in two of these there is no doubt of the success of the treatment; in a third case (Mr. Lawson's) the aneurism was also certainly cured, though opinions may fairly differ as to the part which the rapid pressure played in the cure, as compared with the other forms of compression which had been employed previously. In the other two cases of femoral aneurism the attempt failed, and one of the patients died nine days afterwards of purulent bronchitis, for which no other cause was apparent than the prolonged administration of chloroform. The other patient died after ligature of the external iliac. Finally, we have two cases of popliteal (or perhaps, in Mr. Holt's case, femoro-popliteal) aneurism, both cured.

This record of cases is no doubt extremely encouraging, as far as relates to the forms of disease which do not admit of any other operative treatment except that by ligature of the abdominal aorta, which hitherto has always failed, or of the common iliac, from which only one-fourth of the patients operated on have recovered. But it is quite clear that it furnishes no trustworthy evidence of the superiority of this treatment over that by the more successful cutting operations, or by the methods of pressure in previous use; and I may be allowed to express my firm conviction that the protracted anæsthesia alone is quite as dangerous as the ligature of the femoral artery, and that compression of the abdominal aorta cannot be efficiently accomplished for any length of time without dangers which must be obvious to anyone who will think for a moment of the parts in anatomical relation with it. The total compression also of the common or even of the external iliac artery must involve great risk of fatal contusion of the viscera or peritoneum. I cannot believe, therefore, that the treatment of aneurism in the lower limb for which the femoral might be tied would be improved by substituting for that operation the total compression of one of the large arteries of the abdomen under chloroform; nor am I disposed to look hopefully on the proposal of substituting the rapid or total compression of the femoral under chloroform for the Hunterian ligature, though there is much more to be said in favour of this. But this is a point to which I shall have to recur in speaking of popliteal aneurism.

I must also call attention to the fact that in no instance hitherto has the ligature been successfully practised after rapid pressure has been used and failed. It is true, however, that the cases are as yet so few that this may be merely an accidental circumstance, yet it is one which must attract very serious attention.

In Mr. Benfield's case the ligature of the external iliac artery did seem at first to promise success, and the man did not die till four months after the operation. The tied part of the artery was firmly sealed; but death was caused by hæmorrhage from the sac, the posterior part of which had degenerated, and the bones against which it lay had become eroded. The case has not hitherto been published, but it is one of extreme interest, and I hope it will shortly be put on distinct record.

Meanwhile, without affecting to decide the question either way, I would protest against rashly assuming, because rapid pressure has been successful as compared with ligature of the aorta or common iliac, that therefore it must be successful if compared with ligature or gradual compression of the external iliac or femoral, and that it has no dangers of its own.

It should be added that total and continuous pressure of the femoral can in some cases be successfully applied and borne for a long period without anæsthesia. Gross* relates a case in a negress aged thirty-two cured by pressure applied for forty-five hours by ten assistants on the artery as it passed over the pubes, the pressure being occasionally shifted a little lower.

I have but little to say about the less usual methods of treatment in this form of aneurism. I can point to a case in which galvano-puncture was used successfully in combination with pressure on the external iliac for four hours under chloroform. The operator was Dr. Brandis, of Aix.† It was the very large size of the aneurism which in this case seems to have determined the surgeon to invoke the aid of electricity in hastening the coagulation, which might not have been sufficiently established in so large a mass during the period of instrumental pressure. The galvanism was used in the most efficient manner, as is evident from the account of the case.

Another and a very interesting case appears to me to show the occasional utility of manipulation in aneurisms as suggested by Sir Wm. Fergusson. It was under the care of Mr. Herbert Page, in the Cumberland Infirmary at Carlisle, in the year 1872. The patient was a railway guard, aged twenty-seven, who had had syphilis, but in whom there was no known cause for the aneurism. He had been labouring under aneurism of the left femoral artery, in the upper part of Hunter's canal, for three weeks before admission; and about a fortnight after admission a similar tumour showed itself in the same situation on the other side. Instrumental compression was tried on the left side, and was well borne for a few days, but it soon became intolerable; the tumour began to grow rapidly, with great pain, and the artery was tied. All went on well on this side, except that recovery was somewhat retarded by deep-seated suppuration in the wound. During his convalescence from the ligature on the left side, the right aneurism at first almost disappeared; but in about a month it began to grow again, with much pain both in the tumour and in the leg. He could not tolerate any compression on the artery above the tumour. On Sept. 11th and 12th (the wound made for the ligature of the left artery being then all but closed), Mr. Herbert Page manipulated the tumour, with the view suggested by Mr. Oliver Pemberton's Address in Surgery at the British Medical Association about that time—viz., "to alter the relations of the laminated fibrin in the cavity of the aneurism, so as to bring about a further deposition of fibrin on the projecting surfaces of the displaced laminæ." The pain in the swelling and in the leg was evidently severe. He could not sleep at night; and on Sept. 14th could hardly bear to be touched, the parts were so tender. However, next day (Sept. 15th) it was noted that there was no pulsation, and that the pain had gone; but some circulation seemed still going on through the tumour, since it diminished in size on compression of the artery, and increased again when the circulation was restored. From this time the tumour kept on diminishing in size and increasing in solidity; and in sixteen days from the time of manipulation the man was well enough to go out in a Bath-chair. He was discharged on Oct. 2nd, there being then a small, hard nodule, the remains of the aneurisms, in each thigh. But when seen again in December no trace of either tumour could be detected on the most careful examination.

It is certainly open to anyone to contend that this was a case of spontaneous cure; but as the aneurism was increasing rapidly up to the date of the manipulations, as those manipulations produced a most decided effect, and as they were followed by the precise train of phenomena which were sought to be obtained and which led immediately to the consolidation of the aneurism, I have no hesitation myself in regarding this as a case of cure by manipulation; and I may say that, having shown the notes to Sir W. Fergusson, he is of the same opinion.

One of the most interesting cases of aneurism of the external iliac on record is that which was published in Mr. Oliver Pemberton's Address in Surgery, to illustrate the use of direct pressure in the cure of aneurism. The patient was a healthy active man, aged sixty-seven, who had an aneurism of recent formation just above Poupart's ligament. Seeing the danger of a ligature to the common iliac, which was at that time (1859) the only known alternative, Mr. Pemberton tried the effect of pressure on the artery above, but found that this did not arrest the circulation, which, however, he noticed was much retarded by pressure on the sac itself. Accordingly, Carte's compressor was carefully applied to the sac itself, under the management of two senior students, with only sufficient force to retard the circulation, and for not more than three or four hours at a time—an average of about seven hours a day. For a fortnight no good was done. During the next eight days a good deal of coagulation was procured. He was then allowed a rest of nine days, and permitted to move about the room. Then followed nine days of treatment, averaging six and a half hours a day; and from that time the aneurism

* N. Amer. Med.-Chir. Rev., iii., 73.
† Lond. Med. Record, March 5th, 1873.

ceased to pulsate. When Mr. Pemberton published his Address the man was still alive, active, and well, at the age of eighty-three. The remains of the aneurism were represented by an indurated enlargement the size of a chesnut.

With this I would connect an interesting case of which Mr. Gant has shown me the notes. The patient was very old (seventy-five), with a recent aneurism in the groin, the result of a fall. Pressure above being impossible and ligature hopeless, a Carte's tourniquet was adjusted just below the aneurism, and applied for about two hours daily during about ten weeks. This caused much pain, extending also to the aneurism; but the latter decreased in size and pulsation, and became practically cured. He was seen six months afterwards, the tumour being then very small, with some pulsation, but not of an expansive character.

Arterio-venous aneurism of the femoral artery and vein is not, on the whole, an exceedingly uncommon affection; at least, there are a good many examples on record, spontaneous as well as traumatic, though the latter are, of course, by far the most numerous. Our own museum contains a splendid specimen of this disease, which was given to it by Mr. Beaumont, of Canada (No. 1570 C), and the very interesting history of which is contained in the *Medical Times and Gazette* of July 17th, 1867. It is well worthy of deliberate study as containing many very singular features, but time does not permit me to dwell on them fully. Suffice it to say that the communication between the artery and vein would seem to have persisted for ten years and a half (after a wound followed by very alarming hæmorrhage) before any tumour formed; and the evidence of this was that during the whole of that period the peculiar bruit had been audible, not only to the patient, but to those about him. The cause was a stab received in a quarrel, and the bleeding had been so severe that for two days the patient was near to death. It was only after this long period of abeyance that an aneurismal sac seems to have formed in consequence of some strain while on horseback, which probably caused the giving way of the weakened portion of the arterial wall. The patient died under the influence of chloroform, administered with a view to the ligature of the external iliac artery, and this operation was rendered necessary by the rapid growth of the tumour. Yet, as Mr. Beaumont remarks, the state of parts which the dissection reveals renders it very improbable that the operation could have succeeded, for the superficial femoral vein is altogether blocked above and below the communication with the artery, and the profunda artery and vein are so far compressed by the tumour that they could transmit little if any blood. Besides, in this, as in most cases of arterio-venous aneurism, the artery above the tumour is weakened, dilated, and thrown into curves, so that here the external iliac measured five inches in length. The same was the case in Mr. Perry's patient, where the external iliac was so folded on itself as to form a pulsating tumour, and give rise to the suspicion of another aneurism there. Hence, if the operation had been completed, it seems certain that the patient must have succumbed either to secondary hæmorrhage or to gangrene. Otherwise the obliteration of the femoral vein above and below the opening would in itself have been a favourable feature in the case, reducing the arterio-venous aneurism more nearly to the conditions of an ordinary arterial aneurism. Yet it may be doubted, from the notes of the case, how far this obstruction could have been perfect during life, since the venous murmur and thrill seem to have been perceptible to the end.

Before quitting this case, let me remark on two of its features. One is that in this, as in Mr. Perry's case of arterio-venous aneurism in the thigh, the sac was ossified. This may be a matter more of curiosity than of practical interest. But it is certainly important in a practical point of view to note that, with the femoral vein occupied by coagula, and with the profunda vein so compressed as hardly to transmit any blood, the anastomosing veins, with the saphena, had so completely carried on the circulation, that there was not only no gangrene, but no œdema of the limb. Surely this is a fact not to be overlooked in considering the propriety, in circumstances otherwise desperate, of tying up the artery and the vein together in operations for arterio-venous aneurism.

There are many other cases of arterio-venous aneurism in the thigh to which I should like, if time permitted it, to call your attention in detail. One of the leading cases in this particular is Perry's,* where, without any known cause, an arterio-venous aneurism formed in the thigh of a middle-aged man who had been suffering from an aneurism at the bifurcation of the popliteal artery of the same side for about two years. I shall presently dwell on some of the interesting features of this case, which, however, will well repay a more careful study.

But of all cases which are reported in surgical literature, the one which is most interesting and which leads to the widest speculations as to the pathology and treatment of aneurism, is Mr. Oliver Pemberton's.† In that case the patient had suffered from spontaneous aneurism of the posterior tibial artery, in itself a rare event. This had been cured by the use of compression by means of a tourniquet to the femoral artery in the groin, continued at intervals for nine months, and sometimes applied with considerable severity, till the patient could bear it no longer. The femoral artery on both sides, it should be noticed, had been observed beforehand to be "hard and cord-like." Nine or ten months after the cure of this aneurism, an arterio-venous aneurism showed itself in the groin, at the seat of pressure, and this went on increasing till his death, which occurred twenty months afterwards, as the result of dropsy dependent on disease of the heart and liver. During this time the disease had made progress, the veins had become large and tortuous, and the extremity much enlarged. It was evidently the condition of the viscera which forbade the attempt at any cure of the disease, and doubtless in this case such contra-indication was complete.

I am embarrassed by the numerous points of interest which this well-known case comprises, and which have reference, first, to the pathology of the disease; secondly, to its diagnosis; and, thirdly, to its treatment. I had better perhaps, leave aside the first point to be treated hereafter, when we come to talk about the possible ill-consequences of compression applied for a long time to arteries not perfectly healthy. I quite admit the possibility, even the probability, of Mr. Pemberton's supposition, that the communication between the artery and the vein in this case arose in consequence of some chronic action in the walls of the artery set up by the long-continued pressure, though neither the author nor anyone else could say that such a cause has been proved, especially when we consider the many points of resemblance which Perry's case, indubitably spontaneous, bears to this. As to the diagnosis, I must limit myself to saying that it was clearly and correctly established by noticing the continuous harsh murmur, "like the ceaseless rushing movements of the steam forge-hammer," and "so harsh that it becomes acutely disagreeable to retain the stethoscope for more than a few moments," which was traceable from one special point of the tumour, and by the enlargement of all the veins leading to that point from above and below. It would have been useless to speak of treatment in a case like this, where the patient was dying of visceral disease, and where the aneurismal tumour was really only a subordinate part of his sufferings. But none the less is the case very instructive, especially taken in connexion with Mr. Perry's, in showing at any rate what ought to be avoided. In both there was a small tumour, causing much venous enlargement and œdema, and a remarkable dilatation, thinning, and elongation of the artery above its point of communication with the vein—a circumstance which has been often noticed in arterio-venous aneurism.

I think the obvious inferences derived from a study of these and other similar cases would be two.

First. That the treatment must be directed to obliterate the orifice of communication between the artery and the vein. It is from this communication that all the secondary consequences of the affection seem to proceed—viz., varicosity of the veins, degeneration of the artery, œdema, pain, and loss of the functions of the limb. This communication may be obliterated in three ways:—1. By laying the sac open, and tying the artery above and below the wound. When this has been done the surgeon may use his own judgment as to tying the vein also. 2. By tying the artery above and below outside the sac. 3. By compression applied to the venous orifice and to the artery above the tumour. This is best done simultaneously after Vanzetti's

* Med.-Chir. Tr ns., vol. xx.
† Ibid., vol. xliv.

method. But cases have been successfully treated by first compressing the venous orifice until the latter has been obstructed by coagula; the arterio venous is thus converted into a simple arterial aneurism, which is afterwards treated in the usual manner.

Secondly. All cases which have been dissected at a late stage of the disease prove that the artery becomes so attenuated and enlarged above the tumour that no operative interference can then be successful. Hence the necessity for treating the disease decisively at first, and for abandoning operative interference if the case is not seen sufficiently early.

PRACTICAL NOTES ON CUTANEOUS SUBJECTS.

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XII.—TINEA DECALVANS.

I LIMIT the term tinea decalvans to that form of circumscribed alopecia which is produced by the attack of a vegetable parasite, the microsporon Audouini. The existence of this form of disease is denied by almost every authority. I am still convinced that there is such a disease. Parasitic sycosis is said not to occur, but I was recently enabled to demonstrate the contrary at a late meeting of the Pathological Society of London. Dr. James White, the Professor of Dermatology in the Harvard University, has put on record two cases of parasitic alopecia (tinea decalvans) in a paper in the third annual report of the State Board of Health of Massachusetts, and recently he wrote to inform me that since the paper was written he has "had another case of the parasitic form." No doubt as the experience of others increases similar cases will be observed. Within the last few months I have met with two or three cases of parasitic alopecia or tinea decalvans, and, as the facts connected with them are of much clinical interest, I venture to put them on record as follows.

First set.—Mr. P—— called on me with three bald places on his scalp, two the size of threepenny-pieces, the other that of a shilling. They had all the appearance of tinea decalvans. Many of the hairs around came away readily when traction was made upon them. This gentleman stated that he noticed the bald places suddenly one morning, and his attention was directed to one by the presence of a little pimple. This pimple I saw; it was a pustulation of one of the hair-follicles, containing a hair loosened from its follicular walls, and coming away with its sheath attached to it. I examined certain of the hairs under the microscope. Certain of them were atrophied and tapered at the point, as is usual in alopecia, and without any attached sheath. In others the hair-bulbs were fairly normal, only perhaps pigmented more than usual, and some were more club-shaped than usual at the extremities, as though the hair had been "squatted" by pressure from above. These latter hairs were surrounded at the part where the hair emerged from the follicle with a good deal of epithelial matter, *débris*, and albuminous matter, but no pus; and it seems to me that the tying or adherence of the hair to the follicle, due to the inflammatory action and epithelial collection, offered a difficulty in the ordinary elongation of the hair or the follicle, and this led to the "squatting" before spoken of. But in addition I detected here and there about the point of the epithelial accumulation minute fungous elements in the form of very delicate wavy mycelial threads.

I attribute the epithelial accumulation in the upper part of the follicle especially to the irritation induced by the parasite. But the chief interest of the case is to be found in the fact that two children of this man were under my care for ordinary ringworm, and the father persisted that he had taken the disease from the children. Now it is very unusual for a grown-up man to be attacked by tinea decalvans, and the fact that it occurred coincidently, in the present case, with the development of tinea tonsurans in two children of the parent is, to say the least, noteworthy; and when it is remembered that upon one and the same head diseased conditions exactly corresponding to tinea decalvans, on the one hand, and tinea tonsurans, on the other, may concur, the relation established by the particular case under notice is still more interesting. Again, in my patient the hair-roots were not all atrophied. Some were actually enlarged, and surrounded by a more than usual amount of epithelial accumulation, both of which states, I have explained, probably resulted from the action of some irritant upon the interior of the follicles; so that, after all, the atrophy in my case was not a *primary* condition at all, but actually secondary to a hyperplasia. And I should say that in the particular sequence of events here referred to lies the difference between tinea decalvans, a parasitic disease, and alopecia areata, in which the disease is a pure and simple atrophy, in which atrophy occurs from the outset, and is, in fact, primary.

Second set.—I was sent for to visit a public institution some twenty miles from London to advise measures for the stamping-out of ringworm, which existed in the school as an epidemic. There were at my first visit some four or five and twenty cases of tinea tonsurans, of varying degrees of severity. Amongst a batch of girls I found, at a second visit, no less than five cases in which the disease answered in all particulars to tinea decalvans. There were one or more small circular bald patches, the size of a sixpence or a shilling, on each head. But on one of the heads a patch of tinea decalvans concurred with others of tinea tonsurans. For obvious reasons, I do not divulge the name of the institution, but the medical officer and I were both convinced of the correctness of the diagnosis in these cases. There were the two diseased states side by side on the same head, answering to the accepted descriptions of tinea tonsurans and tinea decalvans respectively. My object is merely to put on record an additional instance of a concomitance which I have described at other times and in other places as indicative of the occurrence of a circumscribed alopecia from the attack of a parasite.

XIII.—MORPHŒA ALBA, AND ITS TREATMENT.

Cases of morphœa alba are not very common in practice, but they are important ones to diagnose correctly and to treat carefully. This disease is characterised by the occurrence of usually small patches, which feel firmer than the natural skin, and look as though the skin had been converted into a substance like white or faintly yellow wax. There is usually a pinkish halo of vessels around the waxy-looking spot, even when this is as small as a pea, but this halo varies in the degree to which it is visible. At first a small spot appears, and the area of the diseased surface extends, the pinky-hued ring or halo of vessels gradually extending in all directions as a circumferential bordering of the white and central area, which may be slightly raised or even slightly depressed. The disease consists in a fibroid degeneration of the skin in all its parts, with condensation of the altered textures. It is very important to recognise the disease, because much harm may be unwittingly done by the use of stimulating or irritating remedies, and much can be done to check the disease and, indeed, to hasten its cure, by the early prescription of suitable internal medicines. The face is oftentimes the seat of the disease, which may lead, if allowed to run an unchecked course, to no little disfigurement from atrophy of the involved tissues. The disease tends to get well, but it may linger a considerable time. Persons attacked by it are generally much debilitated, and are often pale and anæmic. They recover in proportion as, by the judicious use of iron, quinine, arsenic, and cod-liver oil, with good food, the jaded and exhausted powers are replenished.

The following details may serve to illustrate clinically the features of an ordinary case of morphœa alba.

Elizabeth W——, aged thirty-five, has enjoyed pretty good health until lately, but at the present time she "feels so very weak," and suffers from much headache. About three months ago she noticed a "white patch" on the lip, and also about the forehead. The patch on the lip was the size of a pea at first, and appeared on the left upper lip. It is now the size of an ordinary almond. The part feels firm and dense, and looks like alabaster. On turning up the lip, the disease is seen to extend through to the mucous surface, and the area of disease is larger on the interior than the exterior of the lip. There is a similar patch on the left eyelid. A third patch takes the form of a band a quarter of an inch wide; it starts from the middle of the

eyebrow, and runs up to shade off into healthy skin at the root of the hairs. A fourth spot of disease is an inch and a half long and half an inch wide, is situated in the front part of the left side of the head (the temporal region). There is a fifth place on the crown of the head, the size of a two-shilling piece, with a tail-piece as it were. The spots all appeared in the order above given. All the spots are hard, dense, and whitish in colour, and some are slightly depressed. There is no areola visible with any of them. The tactile sensibility is fair in all the places, which are the seat, however, of a certain amount of itching. The mouth has lately felt uncomfortably stiff, and the angle of the mouth appears to be slightly drawn down as it were by the condensation of the diseased tissue on one side, giving the appearance of slight paralysis affecting the left side of the mouth. The woman is married, but has never exhibited any sign of syphilis. The only thing she complains of is debility. This patient was put upon a general tonic regimen, and, I believe, improved ultimately in the hands of the medical man who sent the case for my opinion.

When cases of morphœa come under treatment, the patient should at once be made to understand that a long time may be needed for the cure if it progresses ever so well. The disease will in all probability get quite well. At the same time, the use of the knife, caustics, and every other irritant must be scrupulously avoided, and trust be placed entirely in appropriate general tonics.

ON THE CAUSE AND PREVENTION OF SEA-SICKNESS IN SHORT PASSAGES.

BY J. HENRY BENNET, M.D.

DURING the last fifteen years I have crossed the Channel between thirty and forty times, and I have made scores of voyages in the Mediterranean in spring, in all kinds of weather. I have thus increased former experience of sea-sickness, and have arrived at some practical results, as regards prevention, which prove valuable to myself and friends, and to which I am desirous to give publicity.

On one of my late voyages in the Mediterranean I encountered vile weather, and succumbed, after being twenty-four hours at sea. Whilst enduring all the misery of sea-sickness I once more tried to analyse my own sensations, and to find why it was I was suffering. The most approved theory is that sea-sickness is a nervous affection, connected with the brain, and with the ever-changing position of surrounding objects, relatively to the body and vision. I feel convinced, however, that such is not the sole cause, from my own personal experience. I have no fear whatever of the sea. Unless actually ill, I delight in being on it, however rough, in any way—swimming, in a boat, a steamer, a yacht, or a sailing vessel. If not very rough, I am quite happy and well, and can eat ravenously. Yet sometimes, when the motion is very great, especially when it is a cross motion, such as a combination of plunging and deep rolling, as on this occasion, I become desperately ill, throwing up huge quantities of bile. What has the nervous system, or change of position, to do with such sickness in one who, like myself, on land feels no inconvenience whatever from any description of motion or gyration? Whilst lying on my back in the cabin, crossways to the ship, which rolled until twenty times in the minute, the port-hole window was many feet beneath the sea, I watched the water in the decanters and basins. As we rolled the water rolled too, swashing violently from side to side, and I felt that my internal economy was doing the same. At one moment all the moveable contents of the body, liquid and solid, were thrown one way, towards the feet, as it were; the next, they were thrown with violence upwards, and on the diaphragm, on the liver. This latter organ is so imprisoned under the ribs, so bound that it cannot get out of the way. Tickled, pounded, in this manner, it gets angry, excited, stimulated, pours out bile into the intestines and stomach, which ought never to receive it, except during the process of digestion, and this occasions sickness and vomiting. This mechanical theory would explain the real efficacy of purgatives taken a day or two before starting, which clear the liver of bile; of a bandage, which protects it from being thus pounded; of habit, of opiates, and of nerve stimulants, such as tea, coffee, wine, spirits, which deaden its susceptibility, and induce it to bear insult and actual blows without resentment. The disturbance of the circulation is also an important element in sea-sickness to be taken into consideration.

Following this train of thought, I think I have discovered the means of avoiding sea-sickness entirely in many cases, not in all, in short passages, and of preparing for long passages. The stomach should be absolutely empty before going on board, for I have noticed that sick people generally throw up basinfuls of food on the Channel steamers; but, to avoid exhaustion, a good meal should be taken three, four, or five hours before, according to the nature of the food. Meat requires four, in some five, hours for complete digestion. Then, one or two hours before embarking, some very strong coffee, tea, or spirits and water, should be taken, without milk or other food. This is to tonify the nervous system, and yet to secure emptiness of the stomach, fluids being usually absorbed in less than an hour. Once on board, repose should be enjoined—the recumbent position is best,—and nothing whatever, solid or fluid, should be taken for twelve hours or more, even then very little. On this system food and the medicinal stimulant are taken *before* the stomach is exposed to sympathetic irritation, and the general economy and the nervous system are thereby invigorated. As there is nothing left in the stomach or gives it to digest, it remains quiescent under difficulty. The reason that medicines given in sickness do no good is that they are not absorbed. Once even nausea commences, the stomach refuses to absorb liquids or to digest solids, and the more there is in it the worse it behaves. The best stimulant in my experience is very strong black coffee. Scores and scores of my friends and patients have escaped sea-sickness in short passages by observing these rules, and have diminished suffering in longer ones.

It will be perceived that, so far from countenancing the prevalent idea that travellers at sea should go on board with a stomach full of food, I consider that it is an error to do so. To fill the stomach with food before starting is to give it several hours' work to perform at the very time that it is disturbed, bewildered, and annoyed by the tumultuous motions of the vessel. How can it do its work? It cannot, refuses, and sickness follows. On the Channel steamers it is very seldom indeed that the basins are empty; generally speaking they contain at first pints, quarts of semi-digested food, showing that its presence in the stomach has been a cause of sickness, not a prevention.

In longer voyages, of course, food and fluids must be taken, but I feel inclined to wait until they are wanted, and then to give very simple food at first, such as milk with brandy or coffee, gradually increasing its quantity and varying its nature, as the stomach gains power and becomes accustomed to the motion of the ship.

In long voyages many patients of mine have derived very great relief from the injection of laudanum into the rectum, retained; ten, twenty, or thirty drops at night. Long sleep is secured, during which the body becomes accustomed to the motion, and the next morning light food is often kept on the stomach. I should think that the hypodermic injection of morphia in extreme cases might be beneficial; it is certainly deserving of a trial, and I am not aware that its use, which I recommended many years ago, has been yet tried.

Grosvenor-street.

ON AN

IMPROVED EXTENSION APPARATUS FOR THE TREATMENT OF FRACTURES OF THE SHAFT OF THE FEMUR.

BY G. BUCKSTON BROWNE, M.R.C.S.,
DEMONSTRATOR OF ANATOMY AT UNIVERSITY COLLEGE.

THE perfect cure of an oblique fracture of the shaft of the femur, when the ends of the bone have been completely displaced, has baffled the ingenuity and the skill of surgeons from the time of Hippocrates. The fact that a recovery with half or three-quarters of an inch shortening is at present considered satisfactory should serve as an excuse for the introduction of any improvement in treatment, however slight the alteration may appear.

The opinion of surgeons at the present day will be found to be almost unanimously in favour of treatment in the straight position, as ordinarily practised before Percivall Pott advocated the so-called physiological method or treatment by position.

Hitherto the difficulty has been the proper application of extension. Ordinarily it has been kept up by means of a long splint (Liston's splint), or by means of weights or screws, or, more recently, by elastic traction. The objections to Liston's long splint are that it is apt to strain the ankle-joint, and that, notwithstanding the greatest care, awkward sores are liable to form about the malleoli and over the tendo Achillis. Serious shortening, moreover, not unfrequently attends this mode of treatment. Weight extension, however carefully applied, is generally cumbrous, and always more or less remittent, for the cord is very apt to get entangled with the bedclothes, or to slip off its pulley, especially when the patient has to be moved.

Mr. De Morgan and Mr. Cripps have each invented ingenious splints, in which continuous elastic traction is employed. It was in search of an apparatus rather simpler than these that the writer first employed the elastic stirrup extension, described in Mr. Berkeley Hill's "Essentials of Bandaging," p. 74. It was found, however, that the extension could not be properly regulated, and that the foot was drawn so forcibly outwards towards the splint that much force was lost, and the skin over the external malleolus endangered. To remove these objections the apparatus here figured was proposed, and, meeting with Mr. Erichsen's approval, was adopted in his wards, with hitherto good results.

FIG. 1.

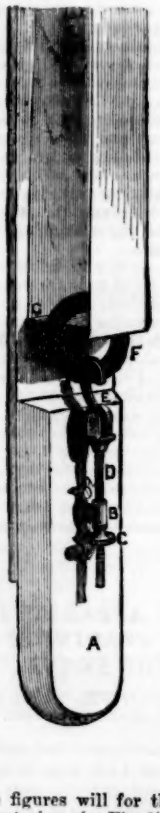
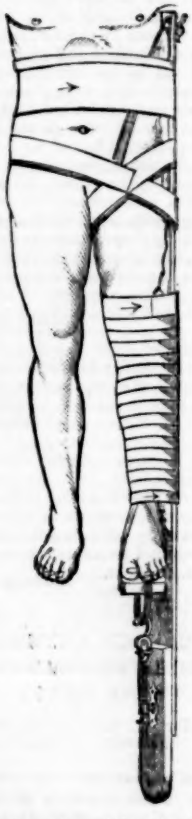


FIG. 2.



The figures will for the most part explain themselves. The foot-piece (G, Fig. 1) is a piece of wood, four inches by two and a half, notched to receive a stout india-rubber ring (F), technically known as a "horse's cutting ring." The foot-piece and the ring are secured to the limb by means of an ordinary stirrup of stout strapping, two inches wide, extending above the knee, so as to relieve the joint of strain. A long splint is prepared, reaching from the axilla to about eight inches beyond the foot, to the lower four inches of which is screwed a piece of one-inch plank (A), about eight inches long. This piece of wood throws the direction of the traction into a line with the axis of the limb. The limb is then bandaged in the usual way to the long splint, the bandaging being begun above the ankle. When the bandage has been carried above the knee, the leg and splint are grasped together by the surgeon, and extension is made while the perineal band is tightened. A hip spica and a body roller complete the bandaging, but it is well to secure the body roller to the splint by a row of tinned tacks. (In the figure the bandaging is left imperfect to show the perineal band.) Then on the plank (A) is screwed the bracket (B), through which slides the stem (D) of the hook (E). Along the stem and below the bracket runs the screw-nut (C). The hook is now fixed to the ring; and, the stem being passed through the bracket, extension can be made by screwing up the nut. The bracket and stem are similar to those sold by ironmongers for securing the cords of window-blinds, except that in place of the hook there is a little grooved wheel. This wheel is easily changed for a hook; or the whole apparatus, ring and hook, can be obtained from Messrs. Mayer and Meltzer, of Great Portland-street.

The advantages of this instrument may be thus summed up:—The amount of extension can be regulated to a nicety; the extension is constant, for it remains unaltered when the patient is moved or lifted out of bed; and the bony prominences of the foot are free from all pressure. Finally, it is hoped that by the adoption of this very cheap and simple method shortening may be reduced to a minimum.

The following results have been obtained by the writer, and by his successor as house-surgeon, Mr. Maclean, in five consecutive cases of oblique fracture of the shaft. All, except the second, were caused by indirect violence, the last two being very severe cases of double fracture:—

Name.	Sex.	Age.	Seat of Fracture.	Result.
A. M.	Male	28	In lower third	No shortening.
J. B.	"	17	In middle third	"
J. C.	"	65	Junction of upper and middle third	"
J. N.	"	37	Double fracture: 1. Lower third (oblique) 2. A fracture into the knee-joint	½-in. shortening.
A. W.	"	8	Double fracture: 1. Junction of upper and middle third. 2. Junction of middle and lower third	½-in. shortening.

Many other cases of fracture of the femur which have been treated in this way are not mentioned, as they do not come under the head of oblique fracture of the shaft with shortening and deformity.

INSANITARY CONDITION OF CANAL BOATS.

BY CHARLES A. CAMERON, M.D.,
PROFESSOR OF HYGIENE, ROYAL COLLEGE OF SURGEONS, IRELAND; CHEMICAL AND SANITARY OFFICER, CORPORATION OF DUBLIN, ETC.

MANY thousands of the inhabitants of the United Kingdom use the large boats and barges that ply upon the canals and rivers as dwellings. In Ireland there are more than 4000 "boatmen," of whom a large proportion is employed on the inland waters. The sanitary conditions under which boatmen are placed are therefore a subject of considerable importance; and I propose to show that, so far at least as my observation extends, they are far from satisfactory.

I have inspected a large number of the boats which ply on the two canals that enter Dublin, and anything more insanitary than the condition of the cabins of the majority of them it would be difficult to conceive. These "dwellings" are rarely five feet, and sometimes not more than three feet, in height; only a small proportion of them is provided

with windows, and their sole ventilators are the openings or hatches through which the men descend into their gloomy abodes. The crews of the boats sleep, cook, and sometimes wash in the cabins, their provisions are kept there, and very frequently the boat's dog or dogs are permitted to sleep in them. What becomes of the excreta and slops produced on board? Consigned not unfrequently, I apprehend, to the canal; and canals often afford the only water-supplies to towns and villages. The following description of boats which I have recently examined in the Dublin canals by no means refers to exceptional cases.

No. 1. Cabin 4 ft. 3 in. in height, containing 400 cubic feet; lighted by two small windows about 8 in. square each; a close stove, a bench bedstead, lockers, cooking utensils, &c. Two men sleep in the bed, and a boy sleeps in a "shake-down" on a bench. Only the latter had slept in the cabin the night previous to my examination (at 8 A.M.) the following morning. The cabin felt somewhat, but not very, close. The amount of carbonic acid was determined and found to be ·098 per cent. This amount, though above the normal standard of ·04, is not very high; but then it would have been greater had not the two men who usually slept in the cabin been absent the night previous. Still this cabin was in every respect superior to most of the others which I examined.

No. 2. Cabin 3 ft. 9 in. in height, 7 ft. long, 7 ft. wide—183¾ cubic feet; three occupants (men) having respectively 61¼ cubic feet of space! The three men slept in one bed. The close stove had a turf fire blazing brightly in it (the morning was warm) at the time of my examination. The little cabin was crowded with utensils and odds and ends, by which the cubic space was still further diminished. There were no windows, and the only opening into the cabin was the hatch, 2 ft. by 2 ft. The men had left the cabin an hour before my arrival, and the air in it was no doubt in the meantime somewhat purified, but I found the carbonic acid to amount to ·34 per cent.

No. 3. Cabin 3¼ ft. in height; 350 cubic feet. No windows; hatch 4 square feet—no other ventilator. Stove, with fuel burning in it. Two men and a boy, all occupying one bed. The usual lockers, &c. The atmosphere felt very close, and contained of carbonic acid ·365 per cent.

No. 4. Cabin 4 ft. 10 in. in height; 360 cubic feet of space. No windows; hatch 3 square feet, and no other opening. A close iron stove, with fuel burning in it. Three men sleep in one bed, one man in another, and two dogs on the floor. The place has a predominant odour of turf smoke, modified by various others—those of tobacco, herrings, &c. Very little light, none from the sun when the hatch is closed* during rain. The place swarms with bugs and fleas. The men had not long risen at the date of my visit. The air contained of carbonic acid ·95 per cent. The air of the cabin in this boat felt very oppressive, and after remaining in it for half an hour I experienced the headache and other symptoms so often observed where the atmosphere is loaded with organic matter, and which Dr. Angus Smith has so graphically described in his report on the air of mines and in his work "Air and Rain."

That the atmosphere of such a place as that last described must be highly injurious to health needs no argument to prove in these days of sanitary enlightenment. One of the men in this boat, aged (he stated) forty years, appeared to be at least fifty. He was hollow-cheeked, thin, weak-eyed, and his muscles were very soft. He said that he had been only two years living wholly as a canal boatman, during which time he had lost strength and flesh rapidly, and he was so apprehensive of losing his life that he intended to give up his present pursuit. On inquiry I find that large numbers of boatmen complain of loss of health; and, as their occupation is healthy and not too laborious, their decay of vigour and health must be due to the scandalously bad sleeping accommodation provided for them.

The amount of carbonic acid in a pure atmosphere is from ·011† to ·04. In very badly ventilated places it varies from ·1 to ·5 per cent., but in the cabin of the boat last described it amounted to nearly 1 per cent. The determinations of this gas were made according to Angus Smith's convenient method.

* During rain and in winter, when the hatch is closed, there is no opening whatever by which to admit air; it must come through the chinks.

† Frankland found this low proportion on the summit of the Grand Mulets (Alps).

According to the provisions of the 32nd section of the Sanitary Act, 1866, a ship or boat is to be regarded as a house or dwelling. Therefore there is no reason why the sanitary authorities, urban and rural, should not look after the health of dwellers in those floating houses. The 19th section of the same Act defines as a nuisance any house or part of a house (which means a ship or boat) so overcrowded as to be injurious to health. The minimum cubic space sufficient for each person is not set down in the Act, that being left to the discretion of the medical officer of health. In the metropolitan lodging-houses 30 square and 240 cubic feet are the minima for each person; in Dublin the tenement houses must have 300 cubic feet for each person; and the same space is the minimum allowed by the Poor-law regulations. In the General Police and Improvement (Scotland) Act it is laid down that each person over eight years old shall have 300 cubic feet, and each child under eight years old 150 cubic feet, to sleep or live in. The allowance in the case of children is too small. I believe the London magistrates often order 400 cubic feet to be provided for each person in tenement houses. In the cabins of the Irish canal boats the space per head varies from 40 to 120 cubic feet. These floating dwellings have no earth-closets or other contrivance for receiving excreta. As before stated, I suspect that the effete matters produced on board are for the most part dropped into the water. Ballot found that cholera in Holland travelled the canals. We can now understand why.

The proper remedies for the sanitary defects of canal boats are as follows:—Increased size of cabin. This could be effected by projecting its roof two or three feet above the level of the deck, and this change would allow of proper windows being placed in the cabins. For each person sleeping in the cabin the minimum space should be 220 cubic feet; the ventilating openings to be four square feet per head. The cabins should be placed in the stern and not in the bows, the latter being sometimes the situation selected. McKinnell's ventilator is a most useful one for cabins, as it introduces pure air through the roof, and permits the escape of vitiated air through the same place.

It does not promote decency or morality to permit three or four men and boys to sleep in one bed; therefore for each occupant of a boat-cabin a berth or hammock should be provided.

I have brought under the notice of the Public Health Committee of the Corporation of Dublin the disgraceful condition of the canal boats, and they are about to deal effectively with this serious nuisance.

Pembroke-road, Dublin.

TWO CASES OF HYDROPHOBIA, CAUSED BY THE BITES OF DOGS NOT RECOGNISED AS RABID.

BY HENRY MUSCROFT, M.D.

As two cases of hydrophobia have occurred in this neighbourhood within the last few months, produced apparently by the bites of non-rabid animals, some notice of the same will doubtless prove of interest to the readers of THE LANCET, and perhaps may provoke a discussion that may throw some additional light on the pathology of this fearful disease. The cases referred to would certainly appear to justify the doubts expressed by American physicians as to the necessary connexion between hydrophobia and the bite of a rabid animal.

Only upon one of the cases that have occurred in this neighbourhood was post-mortem examination made, and reference to this will be given; but in the meantime I would suggest that the supposed discovery by Dr. Hammond, of the condition of the medulla oblongata and the morbid appearances in the vicinity of the origins of the pneumogastric and spinal accessory nerves, which was referred to in THE LANCET of August 22nd, have been anticipated in this country, as in the able article on the subject of hydrophobia, by the Messrs. Gamgee, in Reynolds's

System of Medicine, it is stated that "the medulla oblongata and the origins of the seventh, eighth, and ninth nerves have been noticed to be congested, thickened, and softened."

The first case is that of Joseph A——, a collier, who was admitted into the hospital of the Pontefract Union Workhouse on the 23rd of April, when he was stated to be suffering from hydrophobia, having been seen at Castleford, by Messrs. Holt and Kemp, surgeons. When first seen at Pontefract, in the afternoon of the 23rd of April, he was nervous, restless, and agitated, as if the result of continued stimulation by alcohol, and in the absence of information as to the bite having been produced by a rabid animal, I was doubtful as to the true nature of the disease. By spitting and retching and vomiting, he brought up a large quantity of fluid, generally speaking not viscid, but thin and of a brownish colour. He stared about, and complained of pain in the side and at the lower part of the body, and there were occasionally strong general spasms and paroxysmal startings. On one occasion he said that he was poisoned. The nervous agitation and spasms subsided somewhat after giving him a little brandy-and-water and the application of a sinapism. He swallowed the brandy-and-water with difficulty. By some persuasion I induced him to lie down, and I left him, after giving instructions for him to be watched. The paroxysms of spasm continued, and somewhat unexpectedly he became exhausted and lay down, and quietly died a little more than two hours after my visit.

As to this man's medical history before his admission, Mr. Kemp gives me the following:—"Joseph A—— first complained on Monday of a pain over his right wrist, and extending up the arm. On Tuesday and Wednesday he was very low and depressed, and his countenance bore an anxious expression, the neighbours remarking how ill he looked. On Wednesday he walked about his house in a restless, anxious manner, complaining of great pain between his shoulders, and over the region of the heart. I saw him on Thursday about twelve o'clock. He was in a sad state, calling out for more air, and trying to pull something from his throat, which no doubt was constricted by spasm, and he was continually trying to get rid of viscid saliva. He had a dread of anyone going near him, and any attempt to swallow fluids brought on a violent convulsion." His wife tells me that "he was bitten by his own dog in the wrist, six weeks before, and the dog had never shown anything unusual in its temper, but for anything they knew, was in perfect health." I may add to this account by Mr. Kemp, that the man never complained to his wife of danger from the dog-bite until he felt pain; and although on the day of his removal to Pontefract, or six weeks after the bite, he ordered the dog to be destroyed, he did this more in obedience to a superstitious belief in this neighbourhood, as elsewhere, that if an animal be destroyed after biting a man, evil is averted from the sufferer, than from any idea of the animal being rabid.

Post-mortem examination.—Membranes of brain highly congested; arachnoid and pia mater presented a pink appearance throughout; veins much distended; no fluid in lateral ventricles, but numerous blood-points on making section of brain. External appearance of spinal sheath congested; arachnoid and pia mater congested the whole length of cord; spinal cord congested in cervical region; right side of heart full; left lung highly congested, also right; stomach and bowels congested; kidneys natural. There were no signs of inflammation or swelling in the wrist.

This examination was made by my assistant, Dr. Charles G. Skinner, in the presence of Dr. Grabham, Dr. Sims, Mr. Kemp, and myself, Dr. Grabham before the examination having given his unqualified opinion in favour of hydrophobia being produced in some instances by a non-rabid animal—a pathological fact, according to THE LANCET, now recognised in America. I may further state that, subsequently, the contents of the stomach were examined by Professor Attfield, who found no trace of poison.

The next case is one ably reported to me by Dr. Ginders, of Normanton, as follows:—

"William W——, aged thirty-two, an engine-man at a colliery, was at his work on the morning of Sunday, Sept. 6th. After dinner he complained to his wife of feeling ill, and went to bed. His symptoms were those of ordinary catarrhal fever—headache, shivering, aching pains in the limbs, &c.

"I saw him first on the afternoon of Monday, Sept. 7th. He was in bed, and complained of stiffness and pain in the limbs, particularly those of the right side, extending to the right side of the neck. Tongue furred; pulse 90; temperature 100°. The man appeared by no means very ill, and I inquired quite casually if he had any sore-throat. "No," he replied, "but I cannot drink." I then offered him some water, which, to my amazement, when he attempted to swallow, produced a sudden spasm of the throat and some lividity of the face, with a look of intense terror. I struck him with my clenched fist between the shoulders, which relieved him at once, and in all his spasms which I witnessed subsequently, this proved the most efficacious remedy. I inquired in the first instance from the wife for some history of dog-bite; she expressed herself as perfectly certain that he had never been bitten by a dog or any other animal. The following day (Tuesday, the 8th) he was in much the same state, could swallow gruel in teaspoonfuls, also his medicine (belladonna and bromide), but with fear and trembling, the spasms at this time being only excited by water or thin cold fluids. I now ventured to inquire from the man himself if he ever remembered being bitten by a dog. He said he had "no recollection of anything of the kind." The following day (Wednesday) he was considerably worse, much excited, and not daring to swallow anything. The touch of anything cold or a draught of air now excited the spasms, which affected not only the throat, but the muscles of the chest and diaphragm. I gave him a subcutaneous injection of atropine, which appeared to calm him a little. I saw him again in the evening. He sat down on the bed, not daring to lie down, and scarcely to move. My movement on entering the room threw him into a frightful spasm; viscid saliva streamed from his mouth, and his hasty and alarmed attempts to wipe it away invariably brought on the spasms. I tried to make him inhale nitrite of amyl, but it only made him worse. Again I injected him with atropine, and he grew much calmer and easier. I then spread a blanket on the bed, and endeavoured to get him to lie down; slowly and cautiously he drew one leg after the other upon the bed until he was in a sitting posture. I then arranged his pillows and pressed him slowly backwards into the recumbent position. This was scarcely accomplished when the whole body was thrown into a frightful convulsion. For a few seconds he was in a state of opisthotonos; then with one bound he sprang into the middle of the room—face livid, eyes staring, and in a state of maniacal excitement. A blow between his shoulders again relieved him for a moment. I remained with him two hours, the attacks becoming more frequent and terrible to witness. The character of the saliva changed at this time, becoming white and foamy, and lying about him on the floor like snow flakes. About midnight the attacks appeared to exhaust him. He grew gradually weaker, and as two of his attendants were leading him round the room his legs sank under him. He was carried to bed, laid down, and he died calmly without a struggle.

"I should have mentioned that, at the time of my last visit, he volunteered the statement that, about six months previously, a small, rough terrier puppy, about three months old, had scratched him on the knuckle. He admitted the scratch was made by the tooth, and not by the nail of the dog. He sucked the slight wound at the time; it was well in a day or two, and he thought no more about it. A very small, white cicatrix was visible at the spot, but not bigger than a rape-seed—evidently a small punctured wound. The dog was produced at the inquest. Its owner stated that it had from a puppy lived in his house with his eight children; had never to his knowledge snapped at any of them; had never bitten anyone; had never ailed anything, not even distemper, so far as he had observed. The dog certainly appeared quiet and quite well."

It will be seen at a glance that, in the cases just described, the symptoms had not their origin in that condition arising from fear of the effects of a dog-bite, as described by Dr. Fayrer; as, in one case, the man had even forgotten the circumstance, and in the other he was only reminded of it several weeks afterwards, when pain in the part directed his attention to the cicatrix. As both the dogs, in the cases just described, were apparently healthy,

we are driven to the conclusion that a dog may occasionally communicate hydrophobia when not apparently suffering from rabies or any recognisable disease whatever.

Whether there may be some especially noxious peculiarity in the saliva of these animals at times, may be a matter worthy of the attention of pathologists. To many it would seem more likely that in certain individuals, whether from being the subjects of a latent *materies morbi*, or of some hidden or unknown idiosyncrasy of temperament or organisation, hydrophobia may occasionally be developed if the saliva of a dog, apparently healthy, be brought in contact with a wound. The saliva of a rabid dog is, doubtless, much more dangerous; but the saliva of some dogs, not rabid, is not free from danger. The above argument, perhaps, is strengthened by the fact of so many escaping after having been bitten by rabid animals; for if peculiarity of constitution be not a principal factor in the production of the disease, upon what hypothesis can the escape of the large majority of those who have been bitten be explained?

As regards the treatment of hydrophobia, is it not possible that atropine, if more courageously administered or injected than hitherto, would be capable of benefit? By its known action on the pneumogastric, it should be beneficial; and scarcely less so if its action in congestion of the spinal cord or its membranes be as successful as indicated by Dr. Brown-Séquard.

Pontefract.

INTERESTING CASE OF CALCULI IN THE BLADDER;

REMOVAL BY WASHING OUT AND BY LITHOTRITY.

BY JOHN FOSTER.

A GENTLEMAN, aged seventy-six, consulted me, in the absence of Sir Henry Thompson, on the 16th of September. He had enjoyed perfect health, and had had no disturbance of his urinary organs until six months ago, when he passed several uric-acid calculi, varying in size from a pin's head to a very small pea; but he had passed none for the last four months. He suffered no pain, slight irritation only, at the end of his penis; never passed blood, but had considerable frequency in making water. He had a narrow stricture at the orifice of the urethra, which I divided, and passed a No. 8 coudée catheter to ascertain if he emptied the bladder. With the urine came a large number of very small calculi; and, by injecting some warm water, I removed, I should think, about three or four hundred. On the 17th I used a larger catheter, and washed out as many more, some of the size of a small pea.

Feeling sure from his symptoms that some more were still remaining in his bladder, he was put under the influence of gas and ether, on Sept. 20th, by Mr. Bailey, and I crushed several calculi, one the size of a bean. Again, on the 22nd, under the same anæsthetic, I crushed two or three more, and removed all calculous matter with the lithotrite and Clover's apparatus. On the 25th the irritation and frequency had greatly diminished, and he went home, having learned to pass his catheter twice a day to empty the bladder of the residual urine.

The case is interesting from the fact that such a large collection of calculi (over a thousand) remained in the bladder, unsuspected, and causing so little inconvenience; and the reason of their not being easily expelled was the inability of the patient to empty his bladder by his own efforts.

Wimpole-street, W.

INFANTILE MORTALITY.—Dr. Hardwicke, Medical Officer of Health for Paddington, in a recent report, makes the following observations:—"The deaths of young children are, as usual, very high, indicating some grave fault somewhere. 84 young children were taken off by measles, whooping cough, and bronchitis, no doubt deaths all accelerated by undue exposure to cold while suffering from attacks of these complaints; 86 more deaths are from the consumption class; 28 deaths from violence or accidental; and 3 from infanticide—these latter by persons unknown.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

CASES OF DISEASE OR OF INJURY OF THE ARTERIES.

(Under the care of Mr. BRYANT.)

THIS week we commence the report of a series of cases illustrating some points in the surgery of the arteries. The report will comprise cases of disease and of injury of the bloodvessels, of ligature of the arteries for wounds, injuries, and aneurisms, and will include one case in which the femoral artery was ligatured for elephantiasis Arabum of the leg. The subjoined were cases of popliteal aneurism: one case having been rapidly cured by means of digital compression; the other having speedily recovered after ligature of the femoral artery, although compression had failed. Some marked difference existed in the two cases. The first patient was a corn-dealer, and apparently a healthy man; and his aneurism seems to have been the direct result of an injury caused by overstraining. His family history was good, and he had not himself suffered from any malady likely to induce disease of his arterial system. The treatment by digital compression was well borne by this patient, and he soon recovered. In the second case the patient was about the same age as the man just referred to, but he was engaged in the unhealthy occupation of a fireman, and had suffered several constitutional shocks. He had had jungle fever; had fractured his leg while in Abyssinia; and it is almost certain that he had had syphilis—at all events he had a node on the sternum while in the hospital. In his case there was no history of injury or overstraining; the swelling showed itself spontaneously, and most probably as a result of disease of the artery. It is, however, a noteworthy fact that, although no distinct improvement declared itself from the treatment by compression, the patient rapidly recovered after the femoral was tied, the wound healed by primary union, and, as far as the aneurism was concerned, there was not an unfavourable symptom. It is not at all uncommon to find that speedy recovery ensues after the ligature of a vessel, although compression did no good, if indeed it did no harm; yet treatment by compression should, we think, as a rule, be thoroughly carried out before the knife is had recourse to.

CASE 1. *Popliteal aneurism; digital compression; cure.*—The following notes were taken by Mr. Robt. Carrington:—William R——, aged thirty-one, a corn-dealer, was admitted into Naaman ward on Feb. 15th, 1872, having on the outer part of the right popliteal space an ovoid, distinctly pulsating swelling, the size of a hen's egg. The pulsations were arrested by pressure on the femoral artery; there was no swelling of the leg or thigh. The largest circumference was 14½ in., the other leg at the same level being 14 in. Pulsation could be felt in the posterior tibial artery, but not in the anterior. The swelling was markedly expansile. The patient was a strong, healthy-looking man. He had never had rheumatism nor any similar disease, nor was there any history of consumption in the family. Three months before admission he was lifting a sack of corn, when he strained his right knee. He felt no further ill-effects at the time, but for a month after had occasionally pain and numbness in the leg, and then a small swelling appeared on the outer side of the right popliteal space, which increased in size, being sometimes larger and then smaller, but was always larger after much walking.

Digital compression was commenced on the femoral artery, and continued from 4 P.M. to 12 P.M., and the pulsation was entirely arrested, but the patient got very little sleep, and the leg felt benumbed.

Feb. 16th.—Compression was commenced again at 8 A.M. and continued till 12 P.M., the pulsation of aneurism not being so strong.

17th.—Compression commenced at 8 A.M.; the aneurism was much smaller, and at 8.30 P.M. the pulsation had ceased. The patient had an injection of morphia and slept well. At 12 P.M. compression was discontinued. The limb was then wrapped in cotton-wool.

On the 18th he passed a comfortable day, with very little pain, and only slight numbness, which disappeared on the 19th. The swelling in the popliteal space had diminished, and there was no pulsation perceptible. The patient continued to improve, and on the 27th he was allowed to sit up, the leg being extended and supported on pillows. The aneurism felt quite hard, was much smaller, and pulsation was felt in the anterior and posterior tibial arteries. A week later the patient left the hospital, complete recovery having taken place.

CASE 2. *Popliteal aneurism; failure of pressure; ligature of femoral; animal ligature; primary union of wound; recovery.*—The following notes were taken by Mr. Henry Caddy:—William P——, aged thirty-two, employed as a fireman on a steamer, was admitted into Job ward on the 30th of August, 1872, with a pulsating swelling in the left popliteal space. The pulsation was regular, continuous, and synchronous with the beating of the heart; there was slight pain, and the patient could not straighten the leg perfectly, and he could only bend it to a right angle. He first noticed a slight swelling at the back of the left knee about five weeks previous to his admission, but it slowly and gradually increased in size. There was very little pain. He had no recollection at all of having injured his leg in any way; he had enjoyed good health, never had syphilis, but eight years previous had two or three slight attacks of jungle fever, and he fractured the lower third of his right leg in 1868 when he was in Abyssinia. He was unmarried, and his family history appeared to have been good.

On the 28th of August the whole of the leg began to swell till it was almost double the size of the other. This continued until his admission, when, after being put to bed, it subsided, and by Sept. 3rd the swelling in the leg had gone down.

At 2.15 on Sept. 4th a tourniquet was applied to the femoral artery about an inch below Poupart's ligament. Pressure was kept up for twenty hours, when a blister was raised.

Sept. 6th.—Pressure was again applied from 3 to 11 P.M. over the femoral, two inches lower down the thigh.

8th.—The tourniquet was applied again from 1.30 to 11 P.M. Pulsation was less, but the pressure was obliged to be taken off on account of the pain which it caused; the pressure was not continuous, but during the ten hours the instrument was in use it was applied seven times, for about an hour and a quarter each time, with an interval of about a quarter of an hour.

9th.—Pressure was applied by means of a weight suspended from a bar over the femoral artery in the same place as at first, a wet sponge being placed between the weight and the sore. Pulsation was less and the tumour felt harder. Pressure was kept up from 12 to 8.50 P.M. There was no pressure on the 11th, but on the 12th, 13th, and 14th it was continued for thirteen hours, ten hours, and nine hours respectively, with intervals as before.

15th.—He had the weight on for two hours, when he could bear it no longer on account of pain in the stomach. Pressure was not renewed until the 19th, when it was applied as before for six hours. Pulsation was distinct, but less than it was; the tumour felt larger but harder. From this date to the 4th of October he complained of sore-throat; the sores on his thigh became very much inflamed; the tumour was as large as when he was admitted, but felt more consolidated. Digital compression on the femoral, just below Poupart's ligament, was commenced at 9 A.M. and kept up till 9 P.M. on the 5th, when the tumour was smaller, and the pulsation did not extend over so large a surface. He had two subcutaneous injections in the arm, but they did not take much effect.

From the 7th to the 15th of October a tourniquet was applied again to the artery for about three hours and a half each day, but as it did not seem to effect a cure, on the 22nd the femoral artery was tied. Chloroform was administered, and an incision was made four inches long and about four inches from Poupart's ligament, along the inner border of Sartorius, vertical in direction; the parts were dissected from the artery, and a carbolic catgut ligature applied. All pulsation stopped in the aneurismal sac, in the posterior tibial, and dorsalis pedis arteries. The patient felt quite well the following morning. Temperature 99°; pulse 96. He slept in the night and had no pain in the leg, which was wrapped in cotton-wool and was quite warm.

Oct. 26th.—The man's neck and shoulder were very painful and tender, and his hands and arm feel numb.

29th.—The incision in the thigh had quite healed; the pulsation was felt over the tumour, but ceased on the 1st November; there was pulsation in the anterior and posterior tibial arteries.

Nov. 3rd.—The patient had great numbness and tenderness in his right hand; nothing could be seen, only the muscles of the hand and arm seemed wasted, and were more flaccid than those of the other.

6th.—Over the sternum, opposite the cartilage of the third rib on the left side, a small hard oval nodule appeared, tender to the touch, but otherwise not painful; the skin over it was normal, and moved over the tumour; the raised surface was about an inch in diameter; there was no enlargement in axilla or neck, and no pulsation. Iodide of potassium was ordered, but was stopped two days after, on account of its prejudicial influence.

11th.—The node on the chest was less, and was not so painful; there was pulsation in the articular arteries; the tumour was harder and contracted. He got up on the 19th, was out for a walk on the 27th, and left the hospital the following day well, except that his foot was a little swollen; but he could walk very well. His arm was much better, and he had more power in it. The tumour was contracting, and felt hard.

LONDON HOSPITAL.

A CASE OF COMPOUND DEPRESSED FRACTURE OF SKULL; PARTIAL LOSS OF MEMORY; OPERATION; RECOVERY OF MEMORY; DEATH.

(Under the care of Mr. J. MCCARTHY.)

WE have recently published several remarkable cases of injury to the skull and brain, but the subjoined is of more than usual interest. Clinically, the case presents many peculiarities. The patient had sustained a serious injury to the skull; a hole had been made large enough to admit the finger, detached pieces of bone had been driven into the brain, and yet the patient was able to walk home, and did not attend the hospital till the third day. Even then he could give some account, imperfect it is true, of the manner in which he had received his injury. There was no evidence of paralysis of motion or of sensation. The marked feature of the case was the mental condition. It will be seen that the patient could not directly state his name, but that he could write it, and that he readily recognised it when it was written. On one occasion when the word "J——" was pronounced, he remembered the word, but did not recollect for the moment that it was his own name. For a day or two he recovered his memory, and could answer questions correctly. Subsequently he relapsed, delirium set in, and the patient died sixteen days after the receipt of the injury.

For the notes of this case we are indebted to Mr. Sincock.

On Jan. 30th, 1873, F. J——, aged thirty, came to the out-patient department. He walked in steadily, took his place among the other patients, and when his time for examination came, handed in his paper as he had seen the other patients do. There was a bandage on his head, his face was flushed as if he had been drinking heavily, and when asked what was the matter he muttered incoherently something about his head, a man, a boy, and a pair of tongs. He then said that the accident had happened on the 29th, but that he could not tell anything more, as all seemed to go round. His wife, being in the waiting-hall, was sent for, and said that on the 27th her husband, while at work, was struck accidentally by a pair of pliers, which another workman was flinging at a boy; that her husband was knocked down, but soon recovered, so as to go to some neighbouring surgery where the injury was supposed to be merely a laceration of the scalp. His wife did not pay much attention to his manner of speaking that evening, but the following day, being alarmed at his increasing forgetfulness, wanted

him to attend the hospital, but could not persuade him, as he thought his injury trivial. The next day (the 29th) she did succeed in getting him to apply to his master for a governor's letter for the hospital, and so another day was needlessly wasted. As she told this story her husband stated that each particular was correct, but that he could not tell it himself.

On examination, a wound nearly healed was found in the scalp over the posterior inferior angle of the left parietal bone, and when the edges were separated it was seen to communicate directly with an irregular opening into the cranium large enough to admit the little finger up to the first joint. There was no evidence of any paralysis of motion or sensation. Loss or confusion of memory was the only noticeable result. Thus, when asked as a test to mention the days of the week, he did so very slowly but correctly up to Friday. When asked the name of the next day he repeated "Friday." And this again and again until he was asked what day came after Friday, when he answered, "Sunday," apparently having forgotten the word Saturday, and substituted for it the last word he had uttered previously. He walked up to the operating theatre, and chloroform was administered. During the inhalation brain matter protruded from the wound. Mr. M'Carthy enlarged the scalp-wound, and removed with a Hey's saw a projecting piece of bone, and then, with the aid of a bent probe, extracted six pieces of bone of various sizes, the largest, which comprised both tables, being about the size of a sixpence, the inner table being a little larger than the outer. The brain was soft and pulpy. Water dressing was applied to the wound, and the patient was removed to the wards. His temperature was then 102° F., and six hours later 100·8°.

Jan. 31st.—His eyes were examined with the ophthalmoscope, and found to be normal. He complained of want of sleep, but otherwise seemed very well. When asked his name he could not tell it, but volunteered to write it. This he did correctly, and in large, well-formed characters. To all succeeding questions as to age, occupation, &c., he replied, "J——" (mentioning his own name), the name he had written. He appeared to see well, but could not name any of the letters on his bed card. He complained of loss of power in his left arm, but there was not any evidence of it.

Feb. 1st.—His general condition was the same. When asked his name he was still unable to answer. When asked to write it he did so readily, then read aloud what he had written, and said it was his name.

2nd.—Still unable to answer his name. Mr. M'Carthy now varied the test by asking him, "Who is J——?" He hesitated for some time, and then said, "I know him; he is a friend of mine." And then, after a little time, he added, apparently much surprised at the discovery, "Why, it is myself."

3rd.—Had slept well; was quite easy and comfortable; could answer all questions put to him; gave a connected account of the accident, and how it had occurred.

5th.—Not so well; face flushed, and complained of pain in his head. His memory again failing; for instance, he called his blanket "flannel," and chin "chest." Temperature 100·2°.

6th.—A fungus-looking mass protruded from the skull. This was removed, and a compress applied. He was very irritable, and sometimes wandered in his speech.

He now became rapidly worse, was delirious and extremely violent, and died on Feb. 11th, sixteen days after the receipt of the injury. A few hours before his death it was observed that his mouth was slightly drawn to the right, and that the left orbicularis palpebrarum did not act so well as the right. There was no other evidence of any paralysis.

At the post-mortem examination the left parietal lobe was found almost diffluent, and the left optic thalamus much softer than the right. There was a little lymph at the base of the brain. All the fragments of bone had been removed at the operation.

The case is instructive, proving the necessity of careful examination of all, even apparently trivial, injuries of the head, and also tending to show that memory is of different kinds, of which some may be impaired and others not. Thus the man had completely forgotten how to say his own name, but could write it without any hesitation. Again, on seeing it when written, he at once remembered that it was his name; but, after the lapse of some hours, when his name was mentioned, and he was asked, "Who is J——?" although he recognised the sound as familiar, he was some minutes before he could recollect that it was his own name.

LEEDS GENERAL INFIRMARY.

TWO CASES OF LITHOTOMY.

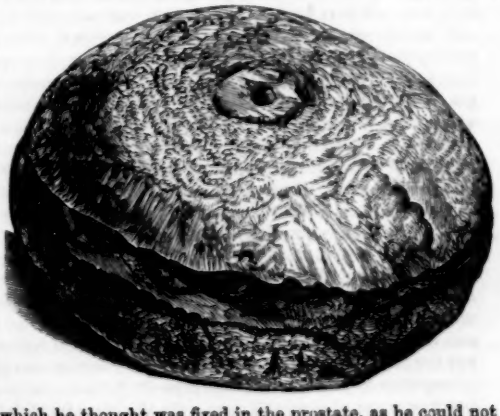
(Under the care of Mr. T. PRIDGIN TEALE.)

THE two cases here reported are remarkable: the one on account of the small size of the stone (4½ gr.), and the imminent peril into which it brought the patient; the other on account of the large size of the stone (8 oz. 1 scr.), and the comparative immunity of the patient from grave symptoms and suffering both before the operation and during convalescence.

CASE 1.—Joe W——, aged four, was brought into the infirmary on account of bruising of the penis accompanied by retention of urine, the retention being supposed to be the result of the injury. It was also reported that the medical man who had previously seen the child had said that he was suffering from stone. The retention was relieved, by one of the resident medical officers, by means of the catheter; but no stone was felt. After the lapse of a day or two, the retention constantly recurring, the house-surgeon failed to introduce the catheter. After making an unsuccessful attempt to pass the catheter, Mr. Teale decided to perform median lithotomy, with the object of relieving the retention, of saving the patient from any further risk of false passages, and of removing the stone if one should be found.

Operation.—The urethra having been opened in the median line, and the neck of the bladder dilated with the probe gorget, guided by a director, a small stone (Fig. 1), four grains and a half in weight, was detected and removed. The child rapidly recovered.

CASE 2. (Reported by Mr. McGill.)—Judah K——, aged fifty-one, was admitted into the Leeds Infirmary Sept. 8th, 1873. When twenty years old he passed blood in the urine, and also two or three small calculi. He was amiss for a short time only, and from that time till February, 1873, he enjoyed first-rate health. He then had an attack of what he calls inflammation of the bladder, which was relieved by the passage of a small calculus about a quarter of an inch in diameter. At the end of May, 1873, another attack of the same kind occurred, and as the symptoms indicated the presence of stone, he was sounded, but no stone was detected. His symptoms increasing in severity and the pain in the bladder and penis becoming excessive, he was again sounded in August, and a stone was found. When admitted to the hospital he was a healthy, cheerful man, and his disease did not seem to have materially affected his general health. On sounding him, Mr. Teale felt a large stone,



which he thought was fixed in the prostate, as he could not easily push the sound past the stone into the bladder. The heart, lungs, and other organs were apparently healthy.

Operation, Sept. 11th, 1873.—A curved staff was passed along the urethra, but could not be made to enter the bladder, as the point was arrested by the stone. The urethra was opened and the stone reached by the usual lateral operation. The stone was seized and was extracted with some difficulty, and very slowly, so that as far as possible the structures might be dilated and not torn. The calculus was flattened, smooth, and chiefly composed of lithic acid; its weight being 8 oz. 1 scr., length 3 in., width 2¾ in., and depth 2 in. (Fig. 2.) The patient recovered without a drawback, passing urine by the urethra on the seventeenth day; and when seen on Sept. 14th, 1874, was in good health, and with generally a complete control over the action of the bladder.

Reviews and Notices of Books.

A Treatise on Food and Dietetics, Physiologically and Therapeutically considered. By F. W. PAVY, M.D., F.R.S. London: Churchill. 1874.

THE importance of the subject, to the public and to the profession alike, is amply sufficient to ensure a hearty welcome to a treatise on food from the pen of one who has devoted so much attention to it as Dr. Pavy, and who is so high a scientific authority on all questions relating to digestion and assimilation. The work before us in no way falls short of the expectation which the name of its author awakens. Not pretending to contain much original research, it presents an admirably clear, full, well-digested account of all important facts and theories on the supply of force and material to the human organism. The size of the work, the conciseness of its style, the extent of its information, the completeness of its scope, and the general accuracy of its statements, reflect not less credit on the industry than on the ability of its author.

Dr. Pavy "begins at the beginning" with a chapter on the dynamic relations of food, commencing with a sketch of the theory of the conservation of energy, and its relation to the "origination of food." He then devotes about a hundred pages to a review of the various "alimentary principles," nitrogenous and non-nitrogenous, their chemical relations, their digestion, assimilation, and uses in the organism. He analyses clearly the long discussion concerning Liebig's theories of the destination of the different alimentary principles to the "calorifacient" and "histogenetic" uses, concluding, with most other investigators, that each purpose may be subserved by nitrogenous or non-nitrogenous elements. The author then reviews the protein-yielding substances which go to form the living tissues and the active constituents of the various secretions, and which are moreover intimately associated with the production of force. The controversy on the last question is described at length. Numerous experiments are quoted which contradict Liebig's long unchallenged views, and show that the nitrogen eliminated forms no measure of muscular work, so that Traube has gone so far as to assert that muscular force is due entirely to the oxidation of non-nitrogenous matter. The curious diminution in the amount of nitrogen eliminated under active exercise may not, Dr. Pavy suggests, be wholly due to the muscular condition or action. The power of appropriation of nitrogen by the system is influenced greatly by many conditions—among them, by exercise; and the system during exercise may be able to appropriate more nitrogen than it gives off, and *vice versâ*. Although it is certain that muscular action is not the result of muscular destruction, it is certain also that nitrogenous matter increases the capacity for muscular work, but how is not at present known. On the other hand, it has been found that the excretion of nitrogen, in the form of urea, is in direct proportion to the amount ingested, and the rapidity with which the increase appears in the urine is illustrated by some experiments on Mr. Mahomed, in which the ingestion of a beef-steak led to an immediate rise in the hourly excretion from ten to twenty-one grains of urea, and the increase in urea was uniformly accompanied by a decrease in the amount of urine. The precise place at which the metamorphosis of nitrogenous material takes place is still obscure, but Meissner's experiments point to the liver as the probable seat of the change. The hydro-carbonaceous residue which remains from the albumen after the removal of the urea is capable of undergoing combustion and yielding force; some probably may be stored up as fat, as the experiments of Lawes and Gilbert on the fattening of pigs seem to prove. The nutritive value of the gelatine-yielding compounds is still questionable, in spite of the attention which has been bestowed on the subject. There is no doubt, however, that gelatine behaves like a proteine compound in relation to force production, for the elimination of urea is increased by a copious ingestion of gelatine, and the resulting hydro-carbonaceous material will be available for the same purposes as is that which results from the decomposition of albumen.

The non-nitrogenous principles are then reviewed. Considerations drawn from chemical composition show that in its greater amount of uncombined carbon and hydrogen fat possesses vastly greater oxidisable capacities than starch or sugar, and so a greater capacity for the production of heat and force; and experiments entirely corroborate the conclusion. That the carbo-hydrates which enter the system as sugar are ultimately stored up as fat there is little doubt. Where the change occurs cannot yet be proved, but Dr. Pavy believes, from his researches, that the liver is the seat of the transformation. On the alcohol question he sides with Anstie, Dupré, &c., in believing that the greater part of the alcohol ingested undergoes oxidation within the system and contributes to the production of force. A fallacy has arisen in many of the observations on the excretion of alcohol, from the curious fact that a substance giving all the qualitative tests for alcohol may be eliminated under circumstances in which it is certain that no alcohol has been taken, even for years.

In his full and detailed description of the alimentary substances it is impossible to follow Dr. Pavy, even in outline. Every variety of food, vegetable or animal, receives special notice—its composition, nutritive value, characteristics, injurious qualities, digestibility, are fully described; and even exceptional foods receive due consideration, from the food of the earth-eater to that of the cannibal. Various beverages, alcoholic and other, are fully and usefully discussed. The few omissions which we notice are, perhaps, inseparable from the wide scope of the work. In the account of coffee, for instance, there is no allusion to the careful observations of Dr. Squarey on its effects on the urine; and a list of edible fungi would certainly be in place in a book which will become a standard work of reference. Some more precise information concerning the exact microscopical conditions of the muscular fibre of meats that are easy and difficult of digestion would be an interesting addition to our knowledge.

The last section of the book is devoted to the principles and practice of dietetics in health and in disease. The instinct which naturally leads to a mixed diet is confirmed by theoretical considerations, and also by an analysis of the nitrogen and carbon used in the system and excreted. If this be taken as a basis for an economical dietary, it will be found that such can only be secured by a mixed diet. The habitual diets of various countries and races are then reviewed, and the effects of various kinds of food on the digestive organs, on the assimilation of fat, and

on the secretions, are described. It is interesting that an increase in the proportion of nitrogen taken increases the absorption of oxygen by the lungs, probably by inducing an increased extent of the oxidation of fatty matter. It is possible, Dr. Pavy suggests, that the success of Mr. Banting's system may, in part, be due to this cause. The diet of Mr. Banting, however, as is afterwards pointed out, fails to come up to what has been termed a mere "subsistence diet," and cannot be employed by many persons without serious injury. Special questions in dietetics are next considered, amount and times of food, cooking, &c., and the diet appropriate for various states is described at length. The work concludes with some special dietetic formulæ and a list of hospital dietaries.

St. Thomas's Hospital Reports. New Series. Edited by Dr. BRISTOWE, Dr. STONE, and Mr. CROFT. Vol. IV. London: J. and A. Churchill. 1873.

THIS volume of reports contains articles of various character and different degrees of interest. Some of them bear the marks of having been prepared with much care, some embody the results of practical experience, and a few are mainly valuable from their suggestive character. Among the practical papers, dealing with the results of clinical experience, is the first, by Dr. Peacock, on the cases of fever treated in the hospital between the spring of 1862 and the end of 1872. The number of cases under treatment during that period was thirty. Typhus is more common in males than in females, but in the present series the numbers are equal. In his first series of lectures Dr. Peacock estimated the incubative period of typhus at from ten to fourteen days; but in 1862 he gave reasons for thinking that period too limited, and spoke of cases in which there was a range of from fourteen to twenty-one days. From some cases he is now disposed to think this period even too limited, and refers to a case in which apparently five or six weeks elapsed from the date of exposure to contagion and the commencement of the attack—a very exceptional case. The influence of advancing age in increasing the mortality is well shown in the cases given, and they go to substantiate the truth of the doctrine that a very small mortality attends typhus in young persons. The cases of typhoid were sixty-five in number, the mean age of the whole being 21·8, and the ages ranging from children of four and eight years, to persons of forty-four and fifty-five years of age. Speaking of the different means by which the typhoid poison is communicated, he says that the virus, if disseminated by inhalation of emanations from the body of the patient and especially of their stools, as seems probable, must readily admit of diffusion so as to become innocuous, for the fever is very rarely indeed communicated to persons occupying adjacent beds to typhoid fever cases or to nurses in attendance on them. He mentions an instance, however, of the last. Dr. Peacock alludes to some circumstances in connexion with the eruption which we have ourselves seen—viz., the combination of typhoid spots with those of a petechial character, or with a patchy roseolous eruption, or, much more rarely, with other eruptions. This paper is of a solid practical character, and based upon facts coming within the author's experience. Mr. William MacCormac's short article "On Bloodless Operations" is well worth reading. Having become acquainted with Esmarch's procedure, Mr. MacCormac on August 16th, 1873, followed it up in a case at St. Thomas's Hospital, on which he operated for necrosis of the tibia. The author, in speaking of the disputed question of priority of discovery, gives a brief but, we believe, correct sketch of what had been done in this country and abroad in this direction up to the time of the publication of Esmarch's method. He likewise points out the cases for which it is suitable, and ill or not at all adapted, and makes some suggestions as to its possible value in the treatment of certain cases of aneurism. Dr. Ord's "Notes on Cases of Nervous Disorder," especially that part in which he treats of slips of the tongue and their connexion with unnatural states of the organs of articulation, is very interesting. Dr. Greenfield has a good paper "On Insanity as a Sequel of Acute Disease and Hæmorrhage"; Mr. Wagstaffe contributes an excellent and well-considered and illustrated article "On Intestinal Obstructions: their symptoms, causes, and treatment," and another "On Sacral Congenital Tumours"; and Dr. Stone's short contribution "On the Physical Basis of Auscultation" is good. There are also articles by Dr. John Harley, Professor Liebreich, Dr. Bristowe, and reports of the obstetrical, medical, and surgical departments of the hospital.

OUR LIBRARY TABLE.

The Geography of British History: A Geographical Description of the British Islands at successive periods from the earliest times to the present day, &c. By WILLIAM HUGHES. Longmans, Green, and Co. 1874.—The design of this work, of which the present is a new edition, is admirable. We can corroborate the author's statement that the comparative neglect of the study of geography in our endowed educational establishments is a matter of remark to foreigners cognisant of the place which scientific geography occupies in the course of study pursued in universities and high-class schools abroad. The attempts ordinarily made in our schools to teach this subject are founded upon little more system or principle than that shown in a chronological table of kings and dates, and the consequence is, that the facts are burdensome to the memory, and make scarcely any really useful impression on the mind. It certainly seems strange that this should be so in a country which boasts of exercising sway over so many distant places, and of holding intercourse, commercial and otherwise, with so many foreign lands. By the geography of history, the writer of the book before us understands not only a description of the natural features, climate, and productions of a country, but some account of its races of people, of their place in the family of nations, and of the successive stages by which they have advanced towards the position at which their proper history as a distinct nation begins; and to these subjects he has added maps, and a commentary for the further elucidation of the facts and for the better appreciation of their bearing on history. The sections of the work devoted to physical geography, the ethnology of Britain, English battle-fields, and English colonisation, embrace a large amount of well-arranged information which the student either could not procure for himself at all, or certainly not without great labour and loss of time. The Geography of British History is a good book, and deserves to be popular—useful it cannot fail of being.

The Psychological and Medico-Legal Journal. New Series. Conducted by WILLIAM A. HAMMOND, M.D., Professor of Diseases of the Mind and Nervous System in the University of New York, assisted by T. M. B. CROSS, M.B., assistant to the above chair. New York: F. W. Christern. London: Williams and Norgate.—We have received the first three numbers of this new periodical, and have already drawn upon some of the material contained in them. The journal is conducted, with the aid of an assistant professor of psychology in the University of New York, by that indefatigable worker, Dr. William Hammond, whose productions occupy a prominent part in two of the three numbers before us. Besides some vigorously-written articles on the "Effects of Alcohol on the Nervous System," on "Morbid Impulse,"

and the "Morbid Anatomy of Hydrophobia," by the editor, there are other original papers and translations of much interest bearing on the diagnosis and treatment of nervous diseases, with proceedings of medical societies and reviews. The journal promises well from the numbers that have come before us.

Vorarbeiten für eine Geographie der Augenkrankheiten. Von HERMANN COHN, Prof. an der Univ. zu Breslau. Jena, 1874. Mauke's Verlag.—This essay aims at obtaining from the various ophthalmological institutes of the world correct data to aid in determining the distribution of diseases of the eye in a geographical point of view; also the different operations that have been performed, the different ways in which they have been done, and the success that has attended them. About twenty-two institutions have responded to Dr. Cohn's inquiries for 1870–71, and the results are in every way very important. He adds at the end of the work a series of questions, all of which should be answered. We trust that the surgeons of the different ophthalmic institutions, and the special clinics attached to our great hospitals, both in town and country, will respond to Dr. Cohn's inquiries; and that the results of our operations will show that we are not behind our continental and American brethren.

A Formulary of Selected Remedies, with Therapeutic Annotations. Adapted to the requirements of General Practice, Hospitals, Dispensaries, &c. &c. With Index of Diseases and Remedies, Diet Tables, &c. By E. A. KIRBY, M.D., M.R.C.S. Eng. London: H. K. Lewis.—We have been much pleased with this capital little work. It has been undertaken to supply a formulary, based upon the medicinal requirements of modern practice, adapted to the wants of the practitioner in prescribing and dispensing. As regards the former, we may say that evident pains seem to have been taken in the selection of prescriptions, and as to the latter, the practitioner may save himself a good deal of labour by following the author's practical suggestions. In addition to the number and variety of excellent formulæ, the book contains a good deal of information of a very useful kind to anyone at all busily engaged in practice.

The Betrayal of Metz. By G. T. ROBINSON. London: Bradbury, Agnew, and Co.—Mr. Robinson was inside Metz during the whole of the siege, acting, or endeavouring to act, as correspondent of the *Manchester Guardian*. His book is peculiarly interesting from the fact that he was the only Englishman who succeeded in obtaining the dubious privilege of participating in the horrors of the blockade. The title which he gives his book unequivocally shows his appreciation of the circumstances which brought about the surrender of a fortress which for centuries boasted of its impregnability, and the disarmament of 170,000 soldiers, the flower of the French army, at a time when their passive resistance would possibly have brought salvation to France. Mr. Robinson has exhausted his vocabulary of harsh terms in stigmatising the conduct of Bazaine. Dr. Russell, of *The Times*, has described that unfortunate man as a *café billard* general, "all feathers and boots." Mr. Robinson, not to be outdone, calls him a man "all stomach and pocket," who was always more intent on procuring *paté de foie gras* for breakfast than on the necessities of his troops and the requirements of the situation. Although the author is so bitter a denunciator of Bazaine, it is impossible now to doubt that substantially his estimate of the surrender is correct, or that the verdict of history will uphold the views expressed in the "Betrayal of Metz."

The Transit of Venus. By GEORGE FORBES, B.A., Professor of Natural Philosophy in the Andersonian University, Glasgow. (*Nature* Series.) London and New York: Macmillan and Co. 1874.—Those who want to understand something about the coming transit of Venus, which will be observed at about seventy-five stations (at many of which there will be a large number of instruments) at a cost for the whole of the expeditions, amounting to between £160,000 and £200,000, and to know all about the different methods of observation and the preparations of different nations in connexion with the subject, cannot do better than consult this little work. The writer has done his best to make the technicalities comprehensible, and anyone gifted with a fair amount of intelligence and education should be able to go along with Mr. Forbes in his explanations and details.

The Diseases of Dogs, their Pathology, Diagnosis, and Treatment, together with a Dietary of Canine "Materia Medica." By HUGH DALZELL. The Bazaar Office, 32, Wellington-street, Strand. 1874.—A sensible shilling's-worth about sick dogs and how to treat them. The information is compressed and practical.

REPORT
OF
The Lancet Sanitary Commission
ON
THE DRAINAGE OF BRIGHTON.

MANY years have passed since public attention was first drawn in the pages of this journal to the bad sanitary arrangements prevalent in the most important of English watering-places. Some of our readers will remember the storm of indignation which our criticism called forth. In the month of October, 1862, we published two long reports upon the subject; and although sanitary science has progressed very rapidly since that time, we are still able to refer to those reports with satisfaction. We showed by the chemical and microscopical analyses of Dr. Dundas Thomson, F.R.S., the fearful impurity of the well water, and the extent and disgusting nature of the contamination to which the sea in front of the town was exposed. Three-fourths of the houses then drained into cesspools without any outlet, while the sewage from the remaining fourth was thrown into the sea in front of the houses, producing at low water a stench that was intolerable. Public attention once aroused, it became necessary to do something, and the authorities, who for some time had been coquetting with various engineers, decided at last to adopt the smallest and cheapest of the schemes submitted to them. This, the "cheap and nasty scheme," as it was called at the time, consisted in the extension of the sewerage system, and the carrying of the bulk of the sewage, by means of a three-foot iron pipe, to a distance of one-third of a mile from the shore, right in front of the Old Steyne. In 1864 this new system came into operation, and, imperfect and unsatisfactory as it was, it produced a great improvement in the sanitary condition of the town.

Nevertheless things could not be suffered to rest as they were. As the drainage system was extended, the evil, of necessity, got worse; and in September, 1868, just six years after the appearance of our first report, another was published in THE LANCET. We pointed out that the drainage of the town was still very imperfect, and that the sea was still fouled in a disgusting and ever-increasing manner. Ten thousand cesspools were still in operation, while only four thousand houses were in communication with the sewers; and yet the sea was badly polluted in the neighbourhood of the outlets and for a considerable distance around them. As before, a torrent of indignation and ridicule fell upon us in consequence of this report; but, as

before, it was not without its result. The Corporation was at last roused to vigorous action. Petty economy was set aside, and the wise resolution taken to deal at once in a liberal spirit with the whole difficulty. The necessity, which we had so often urged, for an intercepting sewer in front of the sea, running from one end of the town to the other, and beyond it, was at length admitted, and a scheme for the construction of such a sewer adopted. The work proved more difficult and expensive than was expected, but at length, under the superintendence of Sir John Hawkshaw, it has been accomplished, and an intercepting sewer seven miles in length now carries the whole sewage of Cliftonville, Hove, and Brighton, to Portobello, a point some distance beyond Rottingdean, *where it is discharged into the sea*. This remarkable sewer is circular in its section; it is five feet in diameter at its commencement and seven at its end. It has a total fall of twenty-one feet, an average of three feet to the mile, and it is said to have cost not less than £150,000. Its construction reflects the highest credit upon the town, and we offer our sincere congratulations to the municipal government upon the vigour which they have displayed in the matter. Visitors to Brighton will now bathe in sea water, instead of weak sewage, and the sanitary purification of the town will now, we trust, be satisfactorily accomplished, and Brighton acquire the distinction she so well deserves of being one of the healthiest as well as one of the most charming towns in the world.

But while we admit so cordially the value as well as the magnitude of the new sewer, it is none the less our duty to inquire as carefully as possible into the details of its operation, and to tell in all points the exact truth as far as we are able to arrive at it. We recognise fully the unusual difficulties with which the authorities have had to contend, and the absolute impossibility of their now retracing their steps with regard to the fundamental design of their work, even if it should prove to have been erroneous. The sewer is made and must be used, and it only remains to consider how best to do so. It is, therefore, chiefly with minor details that we have now to deal. On one point, however, we must express our disappointment. The sewage, after all, is to go to the sea, and not to the soil. and that, we must still hold, to be a serious error. No doubt there would be grave difficulties in any attempt to apply the sewage to land on the eastern side of the town. It must all be pumped, and this, of course, would involve a considerable permanent charge. Nevertheless, without pretending to deal with a question which must be decided by engineers, we are inclined to think that the thing might be done, and even to go further, and anticipate a time when, for more than one reason, it *must* be done. Holding these views, we cannot but regret that more attention was not bestowed on the scheme brought forward in 1859 by Mr. Rawlinson. This scheme, which we advocated in 1862, proposed to take advantage of the natural fall of the land, and carry the whole sewage westward to some distance beyond Cliftonville, and there to apply it, partly by gravitation and partly by pumping, to the soil. The estimate attached to this scheme amounted to £123,000, and it would probably have been exceeded; but the sum total would hardly have been greater than that which has to be disbursed for what we think the inferior plan of Sir John Hawkshaw. According to the *Brighton Gazette*, the objection to Mr. Rawlinson's scheme "was that the smell arising from the irrigated land would come towards the town." If so, a most unfortunate blunder was committed, for it is notorious to all who know sewage farms that, except from the grossest mismanagement, they never inflict injury or annoyance even upon those who live close to them. The case of Croydon is alone sufficient to prove this.

With regard to the actual working of the new sewer, our information is not so full as we could wish. The town surveyor, to whom we applied, seemed by no means anxious to assist our inquiries. He told us, in fact, plainly, that THE LANCET had put the town to a great and, he thought, unnecessary expense, and implied almost as plainly that if THE LANCET wanted further information, it might seek it elsewhere. Surely, when the public importance of the question is considered, this tone in dealing with it will be regarded as a mistake. A medical journal attempting the discharge of an important and obvious public duty should hardly be treated as though it were a hostile force endeavouring to ruin the town.

The first question which suggests itself has reference to the capacity of the sewer for the work which it has to discharge. In ordinary weather it is undoubtedly large enough for all requirements, and it would probably have been absurd to have made it larger; but during storms it is confessedly insufficient. Sir John Hawkshaw, in a letter to the Sewers Board, dated July 4th, 1874, writes as follows:—"Two of your former outfalls must be retained as storm overflows—viz., the western outfall and the main valley." These outfalls are accordingly used in times of flood, and the torrent of foul water, after flushing the sewers, runs straight into the sea. We presume there is no avoiding the necessity. From the middle of the town to Portobello the fall is extremely slight, and the difficulty of carrying the sewage away fast enough proportionally great. Only a few weeks ago the sewer was full throughout the greater part of its course and as far back in the valley as Edward-street, at the north end of the Pavilion. It was obviously necessary to open the valves at once, and in all probability they should have been opened before. The difficulty recalls, in fact, a fear expressed by Dr. Kebbell in a letter which we published in October, 1862. "If the main sewer running eastward is to drain the whole of the town, the fall will be so slight that it is a question whether it will not partake more of the character of an extended cesspool than of an efficient drain."

This unavoidable peculiarity of the new sewer suggests the great importance of frequent and thorough flushing. As the water-supply is now in the hands of the corporation, we may fairly hope that no false economy will be exercised in this particular; but a passage in Sir John Hawkshaw's letter, quoted before, suggests a doubt even on this point. He says: "I have not made any arrangements for letting water into the Cliftonville end of the sewer, but a flushing-tank there in very dry seasons might be useful. Whether it is absolutely necessary or not will be better seen after the sewer has been some time at work." How there can be a doubt about the matter we cannot understand. Only a few days ago the same question was discussed at the Shoreham Local Board, and, thanks to the light thrown upon the subject by an independent and intelligent ratepayer named Johnson, it was decided that some system of flushing must at once be adopted.

Equally, or even more important, is the question of ventilation. Open ventilators have been fixed at distances of five hundred feet apart in front of the town, and a thousand feet apart to the east of it. These ventilators are, in our opinion, constructed on a bad plan. Those on the beach facing the King's-road are not much higher than a man's head, and are evidently likely to be disagreeable or dangerous. In other places they are on the level of the road, and are even worse, and we were not surprised to hear many complaints in the neighbourhood of the Pavilion. Some of the flymen told us that the stench was sometimes unbearable, and that they had even had to move their vehicles in order to get out of its way; and we heard from several persons of houses in which the sewer smell had been perceived from top to bottom. Few worse evils than this could be imagined, and it is evident that some remedy must be applied at once. Tall shafts should be substituted for open gratings, and if necessary a proper draught maintained in them by jets of gas. Unless something of this kind is done at once cases of typhoid will be almost certain to occur, and a complete panic might be the consequence.

Standing on the parade in front of the aquarium the other day, we were struck with the old stench so often before perceived in the same place. The sewer ventilators could not in this case have been in fault, for the wind was off the sea. The town surveyor suggested that it arose from putrefying seaweed, but it struck us as utterly different from that well-known and disagreeable smell. It was distinctly fæcal, such as we remember at low water in the old days in the same spot. We cannot pretend to assign a cause for it. Perhaps it arose from some lingering remains of the filth of past years, or perhaps, as was suggested to us, from houses which were still draining surreptitiously into the old outfall. The latter seemed to us the simpler explanation, but we commend the question, as one well worthy of their consideration, to the members of the Sewers Board.

In conclusion, it is necessary to remark that we have reason for thinking that some of the old noxious wells still remain in use even in the heart of the town.

THE LANCET.

LONDON: SATURDAY, OCTOBER 10, 1874.

THE Introductory Lectures of this year may be fairly characterised as displaying less variety but a larger amount of ability than usual. There is, on the whole, greater uniformity in the method of treatment: the same or similar points are dwelt upon by several lecturers, although presented in a different dress and garnished by a variety of illustrations. Putting aside the natural tendency that exists for each professor to magnify the interest and importance of his own special subject, one season differs from another season in the prominence given to a certain line of thought, or to the elevation of one line of study or investigation. There is a fashion in this as in other things. Scientific men are much more dominated or influenced by their imaginations than they would like to believe. A striking discovery, a freshly added conquest, the opening out of any new field for thought or investigation—in short, the spirit of the time, colours the aspirations of the poet, and imparts a tone and influence to the songs of science. The field of medical science resembles a large and comparatively uncultivated tract of country, occupied by a varied and fluctuating population, with an extensive and unguarded frontier, surrounded by cultivated, pushing, and energetic neighbours. In the face of pressing necessities and evils of various kinds, her inhabitants have to reduce to practice the lessons they have learned as quickly as they have acquired them. The science of to-day is the art of to-morrow. The introduction of any new discovery or new method from without speedily imparts an impulse for new undertakings, resuscitates old or improves existing methods of working, or adds a new light or a new weapon for warfare. Thus it is that medical science has grown with the growth of other and allied sciences. She is very sensitive to all external impressions, and has ever been receptive of new lights, and prompt to turn them to new uses; and her condition has never long remained uninfluenced by the invasion of her territory by a striking discovery in biology, chemistry, or physical science. This is pre-eminently an age in which philosophy has aimed at being positive and practical: it is content not to soar beyond facts, and not to try extraordinary roads. The spirit of BACON, HOBBES, and LOCKE has been advanced by MILL, and is being energetically pushed onwards by DARWIN, HERBERT SPENCER, HUXLEY, and others, until it threatens to be represented by the foot-rule philosophy of the mathematician who asked what MILTON'S "Paradise Lost" proved. Nor has it been the part of scientific men only to subordinate moral and mental to physical facts, and to reason from physical to mental and moral facts; but the same critical spirit has invaded the theological world. The age resents all that a scholastic, dogmatic, and authoritative spirit would impose upon it as the creeds and faiths of our forefathers without having first subjected them to the most rigid criticism and scrutinised them afresh by the aid of lights borrowed from physical research. Nor is there any need for timid spirits to be cast down by this. Unless things be tried they cannot be proved; and time will show how far the spirit of this age is capable of meeting the needs of it; how far that variety in facts and phenomena which now distracts us may be merged into harmony and unity; how far those laws which are fragmentary, subsidiary, or empirical are capable of being reduced to something larger and simpler. The human reason, free and unshackled by the dictates of dogmatism, will soon discover how far it can go in planting the standard of discovery and truth, how near the mysterious and impenetrable border-land is, and what means are likely to prove effectual or ineffectual in elucidating the great laws by which things spiritual and corporeal are guided. In science, and especially in medical science, this new-born spirit of free inquiry, unfettered by the doctrines of any authority but the authority of fact and the force of demonstrated truth, has borne and must continue to bear fruit. And it is something of this spirit which has animated several of the lecturers this year, and led them to seize upon and press anew on their hearers the importance of certain points, such as the patient, impartial, and personal investigation and record of facts; the observation and study of nature by the use of their own eyes and intellects, rather than the study of books or by the borrowed and reflected light of others; while, at the same time, pursuing and testing their information and correcting their inferences by the aid of experiment and those instruments and methods employed in physical research. They have indicated how often success attends on him who waits and watches intelligently, and how much this intelligent, patient watchfulness will depend upon and be strengthened by having the mind disciplined by previous training. So far for the practical points of agreement among the lecturers. Others have struck out from the commencement or in the course of their addresses into other and different paths; and some have been content, after following less beaten tracks, to wind up their discourses, with a due regard to propriety and example, by a quotation from LONGFELLOW or some other poet, which, if it were not made, we should miss as we should "God save the Queen" at the end of an entertainment.

To begin with Sir WM. GULL, whose flight was the most ambitious, and who, spite of much that was vigorous, able, and suggestive, occasionally soared so high as to get altogether into the clouds. His address no doubt sounded well; it tickled the ears of his audience with many a paradox; it was oracular and ambiguous; and if his young hearers did not altogether understand what they heard with their ears, we can sympathise with them, for we have a sensation of haziness as to the meaning of several passages that have reached our brain through the channel of another sense—that of the eye. The student's imagination must have been dazzled by the infinite and intimate relations between the microcosm and the macrocosm. We have heard that the late Mr. BUCKLE called attention to the marvellous fact that the leaves of a tree could support themselves without any sense of fatigue, but we did not understand exactly what he meant by it; and we are at a loss to apprehend fully what was meant to be conveyed by the assurance that "there is essentially the

principle of fear in all living things," finding "its expression in the shrinking of a piece of living jelly when it is touched, or the closing of the eye to a particle of dust, and all the like phenomena." Nor do we see how the fear of change is not only the "groundwork of that struggle for existence through which all living things have advanced, but is, in another form, the chief spur to the human intellect." We had imagined that energy and love of work had pressed men on to the fulfilment of their destinies; that to the restless spirits of men of great intellectual calibre there was nothing so intolerable as inaction or so exciting as change. The spirit of a statesman like BOLINGBROKE chafed in obscurity like a caged bird; and there have always been daring minds like that of ALEXANDER, whose chief regret was lest there should be no new worlds to conquer; in short, the saying of the German, that, if truth were presented in one hand and the pursuit of it in the other, he would unhesitatingly choose the latter, expresses the feeling of most great minds.

Professor FERRIER, after dwelling upon the peculiar attractions of the study of medicine and the more elevated position of the medical profession of the present day, said that the consideration of these things carried with them grave responsibilities. He then went on to state that the medical curriculum embraces almost the whole circle of the sciences; hence the serious doubts expressed by many as to the utility or advisability of continuing the study of these accessory sciences as an essential part of that curriculum; and he cited the name of Professor HUXLEY, to which he might have added those of GRAVES and SYME, as sharing in these misgivings. Dr. FERRIER pointed out, however, with much force, that there is danger lest these views should carry us to the opposite extreme, and lead us to consider that the chief and highest aim of the medical profession is to develop a race of purely practical men, to the entire exclusion of that breadth of scientific and general culture which it has always been the boast of our profession to possess. A medical practitioner need not be a thorough botanist, an expert chemist, or an accomplished zoologist; but a knowledge of these subjects very short of such a standard is of the utmost value. Dr. FERRIER then went on to speak of the importance of a study of physiology, of the small advance that had been made in therapeutics, and of the necessity that existed for the establishment of precise and definite laws in regard to the action of drugs. After pointing out the difficulties besetting this subject, which are not encountered in any of the physical sciences, he adds that we require to apply to therapeutics the same rigid system of experimentation as is applied to other sciences—physiology, for example. This naturally led him to the subject of experimentation on the lower animals, and to the vindication of the course adopted by modern physiologists. This portion of Prof. FERRIER'S lecture especially is interesting and novel. But we are compelled, in the cursory survey we are taking of our subject as a whole, to pass on to other lectures.

Dr. DICKINSON'S address, learned and comprehensive, affords a scholarly sketch of the past and present of medicine. Dr. FENWICK approaches his subject from the clinical side, and enforces observation and experiment as the pivots round which the good work done in the past may be continued. He believes that the use of experiment will in the future be one of the chief means of investigation; and he glances rapidly at the lessons to be derived from the history of medical science in the present century. He dwells upon self-education. The illustrations by which Dr. FENWICK enforces his views are generally very apposite and always interesting, and his lecture forms a good, practical, and wholesome address. Mr. MAC CORMAC took a more independent course at St. Thomas's; and, in an address of more than usual interest, glanced at surgical practice and his own experiences in connexion with modern warfare; and we may remark, *en passant*, that a note of warning was sounded at Middlesex, St. Mary's, and University College Hospitals in regard to a career in the public medical services. Professor HUXLEY, at Owens College, Manchester, delivered an address characterised by his usual independent and masculine line of thought. He dwelt prominently and well on that most valuable of all intellectual gifts—the power of advancing truth by original research—in connexion with the institution of two new scholarships at Owens College expressly intended to promote that object. Professor HUXLEY declared that the whole of our modern scientific study of medicine depends upon the assumption that the living body is a mechanism infinitely more refined and infinitely more difficult to understand than our coarse machinery, but still a mechanism which is governed by rules or laws that can be discovered. Modern medicine is, in fact, a kind of engineering.

Political allusions, and references to the enormous amount of disease and mortality due to preventable causes, were made by many of the lecturers, as might have been anticipated, in connexion with the study of public hygiene, and the motto—*Sanitas sanitatum, omnia sanitas*—of the political party now in power. And, last of all, a glance was cast at the scarcely departed system of apprenticeship; Mr. POTTER, of Westminster, being still an advocate, and Mr. OWEN, of St. Mary's, an opponent, of that system.

MR. STANSFELD, in the recently issued Third Annual Report of the Local Government Board—the report of the last year of his presidency,—gives an explanation of the principles which have guided his policy as to the appointment of sanitary officers under the Public Health Act, 1872. This explanation is remarkable for suggesting that, whatever the shortcomings may have been in putting the provisions of the Act into operation as to the appointment of these officers, and in the results obtained, they have arisen chiefly from the large discretion left to sanitary authorities in the matter. The Public Health Act of 1872 requires the appointment of these officers, and indicates three several ways in which the appointment may be made—namely, by combination of authorities, by appointing an officer for a whole district, or by appointing an officer to each division of a district. But, in respect of these several ways, "it rests absolutely," says Mr. STANSFELD, "with the authorities to determine which of them they will adopt." Again, he observes: "The Legislature has evidently contemplated that different arrangements might be found expedient in different localities, or, at any rate, that if a hard and fast

rule is hereafter to be prescribed for the whole kingdom, further experience is necessary to show which arrangement is practically best." Hence the Act made the first appointments, so to speak, tentative. "With regard to the appointment of medical officers of health," he writes, "our general policy has been to advise that whenever the services of an officer possessing special and superior qualifications for the office were likely to be obtainable, a combined district should be formed, and a joint appointment made; and we have invariably instructed our inspectors to this effect." A curious statement, it may be remarked in passing, unaccompanied by some explanation of the manner in which Mr. STANSFELD believed information was to be had of the likelihood of such an officer being obtainable in any district. No less curious is the statement compared with the actual facts of the formation of combined districts; for in the whole of them, without exception, the formation has proceeded, not upon any special likelihood of getting a particular superior officer, but upon the simple business principle of offering a salary which in the open market would be likely to attract such a man. But the discretionary power left to sanitary authorities interposed an obstacle to the fruition of this policy of the Board; for Mr. STANSFELD remarks in continuation, "it must be borne in mind that such an arrangement as this can only be effected by the concurrence and cordial co-operation of all the local authorities interested, as the Board have no power to direct or enforce a joint appointment, however desirable it may appear to them to be. Many rural sanitary authorities have declined to enter into the combinations which have been suggested by our inspectors, preferring to appoint the district Poor-law medical officers as their medical officers of health," to which appointments Mr. STANSFELD, under the circumstances, thought it wise to assent.

In respect of the appointment of inspectors of nuisances, Mr. STANSFELD tells us that the Board's "main object has been to ensure the appointment of an officer for a district large enough to occupy his whole time."

It appears obvious to us that the whole tendency of this explanation is to make the discretionary power possessed by sanitary authorities the scapegoat for the blunders of Mr. STANSFELD'S policy. Before this explanation can be accepted certain difficulties of fact have to be overcome. And, first, as to the initiatory measures promoted for putting the Act in operation by the general inspectors of the Local Government Board. In every instance within our knowledge advice as to the mode in which the Act should be carried out by the sanitary authorities was tendered in the first place by the inspector, under the authority of the Board. The so-called Conferences of Authorities simply resolved themselves into a discussion of this advice; and all the initiatory suggestions as to appointments of sanitary officers emanated from the Board's inspectors. Inspectors of the Board suggested the appointment of Poor-law medical officers as the medical officers of health, each in his own district, whatever its size and population. Inspectors of the Board, again, suggested the appointment of medical officers of health for combined districts, with reference to no other principle apparently than incidence of payment upon the authorities combining. Still, again, inspectors of the Board suggested a combination of both kinds of appointments. Sanitary authorities had to deal with these discordant utterances of the Board; and the natural inference is that the discretionary power they possess in the matter has saved the country from a worse state of things in sanitary organisation than now exists. We admit that the conception of a worse state of things is most difficult; but, after all, we can look with more content on the present jumble of sanitary organisation than upon the Laputan confusion which would have happened had the Local Government Board been able to give force to the various and varying utterances of its inspectors in different parts of the kingdom.

Dr. FRANCIS T. BOND, the medical officer of health for the Gloucestershire union of sanitary authorities, has recently so clearly described the condition of things for which Mr. STANSFELD'S policy is directly responsible that we quote his words, adding also his opinion as to the source of the confusion he describes:—

"The late Government, I suppose with that fear of being in advance of public opinion which is characteristic of so much English legislation, framed the Public Health Act of 1872 in such a way that it left local authorities to appoint medical officers of health just as they felt inclined. But no sooner had it done so than, as if perceiving the mistake it had made, it proceeded to make another blunder by urging local authorities to combine in appointing medical officers of health, though without putting any strong pressure upon them to do so, by uniformly withholding grants from those who declined to comply with its recommendation. Hence we have, on the one hand, medical officers of health supervising districts as large as, if not conterminous with, counties, but with no one under them upon whose co-operation they can in certain emergencies fall back except their inspectors of nuisances, and with no recognised official relation of any kind to that great body of practitioners who are specially engaged in treating the diseases of the poor; whilst, on the other, we have medical officers of health whose district is often merely a parish, with no one to advise or assist them in cases of difficulty, or to keep them up to their duty if they neglect it."

Again, to cite a particular instance of the arrangements of a combined sanitary district, formed at the suggestion of one of the Board's inspectors: Dr. CHILD, the medical officer of health to the Oxfordshire combination of sanitary authorities, writes of his district that, from its dimensions, it is "practically quite unmanageable, not because it is too large or too populous, but simply because it is inaccessible." And, again, he says that during his first year of office he "was not supplied either with the district registrar's returns or with the sickness returns of the district medical officers, nor was there any arrangement made by the various sanitary authorities of the district by which information should be conveyed to him of the occurrence of epidemic disease."

We might multiply illustrations from every part of the kingdom, if it were requisite, to prove that the initial cause of the inextricable confusion which has attended the sanitary organisations under the Public Health Act of 1872 was the advice tendered to sanitary authorities by the general inspectors of the Local Government Board representing Mr. STANSFELD'S policy. This advice was contradictory in different districts; and in an eminent degree, whether in large

or in small districts, it was, as a rule, inconsistent with the regulations of the Board as to the duties of sanitary officers. It was commonly given, indeed, as in Dr. CHILD's case, quite regardless of the possible or probable existence of the means for the performance of these duties. We believe that we are strictly accurate in saying that not a single medical officer of health has been appointed to a combined sanitary district suggested by an inspector of the Board who to the present time has been able to perform the duties laid down by the Board. They almost all labour under the kind of disabilities described by Dr. CHILD; and their appointment, for which the Local Government Board is wholly responsible, is, in any true sense of a medical officer of health's duties, a glaring sham.

The Legislature, as Mr. STANSFELD remarks, no doubt contemplated that different arrangements in the appointment of sanitary officers might be found expedient in different parts of the kingdom; and there can be little question that it equally contemplated that the Local Government Board, in view of these differences and of its action being mainly confined to advice, would base its advice upon competent knowledge of the things to be advised about. It provided the necessary means for obtaining such knowledge, but it did not hold it necessary to require that this knowledge should be obtained before the Board proceeded to the very responsible duty of advising upon the subjects to which the knowledge referred. Mr. STANSFELD's policy broke down because it was not enlightened by the necessary technical knowledge, and, as a consequence, it failed to command the confidence of sanitary authorities. He believed that the former Poor-law inspectors were quite competent, irrespective of any special acquaintance with sanitary subjects, to undertake the difficult and complicated task of advising sanitary authorities, and they believed with him. Mr. WEALE, a former inspector of the Poor-law Board, examined before the Royal Sanitary Commission, exhibited very clearly the kind of reasoning and quality of mind which has proved the stumbling-block of the Local Government Board in its administration of the Sanitary Acts. Questioned as to the knowledge, "varied and deep," of Poor-law inspectors, and as to whether it would include any knowledge of engineering—"Not as a science," Mr. WEALE answered; "but I think he [the Poor-law inspector] would understand a little of it; I can hardly call it engineering; but he would know a little of how drains should be made, and arrangements of that kind." Questioned as to whether he "would be perfectly competent to advise as to the construction of a system of drainage"—he answered, "Yes, I think he would." Questioned as to the competence of the Poor-law inspector to undertake the duties also of sanitary inspector—he said, "I do not think that an inspector of Poor Law could go into a question of engineering, or anything of that kind, unless he had a regular education as an engineer; but I think he would be able to see whether or not the persons appointed to do that duty did it honestly and fairly."

It is this ineffable self-complacency and self-confidence of the Poor-law officials in all manner of knowledge, however "varied and deep," which have been at the root of all the great sanitary scandals that have occurred from time to time in workhouses and workhouse schools. The same self-complacency and self-confidence have characterised the action of the same officials in the initiation of the Public Health Act of 1872. It is now well known that the measures adopted by Mr. STANSFELD for the initiation of the Public Health Act of 1872 were adopted after consultation with the Poor-law inspectors alone, to the exclusion of those subordinates of the Board who, from their special knowledge of sanitary work and organisation, had been attached by the Legislature to the Board to aid it with their experience. Mr. STANSFELD, indeed, based his sanitary policy on dilettantism, and by dilettantism he frustrated the aim of the public health legislation of 1871 and 1872.

GLASGOW, in some respects a highly suitable rendezvous for the Social Science Congress, has furnished but scanty audiences to the various sections. Busy indeed her citizens at all times are; but there are features in her social and sanitary condition which claim from her a full and fair hearing for all who discuss them with authority. She is about the unhealthiest city in the empire. She is a typical specimen of those Scottish towns where disease and death are on the increase from the influx of an Irish-Celtic population. The growing necessity for ampler and healthier house-accommodation is taxing severely her vigorous endeavours to meet it; while river-purification is a local problem which presses upon her with unabated urgency. Yet, with all these inducements to take the liveliest interest in the proceedings of the Congress, the attendance on the various sections was often of the thinnest, betraying an indifference to social questions in general, and sanitary ones in particular, by no means favourable to the cause, or reassuring to its promoters.

In other respects the Congress has been an unusually successful one. If local audiences were meagre, the remoter public has made ample amends. Reports of the proceedings have filled the more prominent journals throughout the kingdom, and have elicited an amount of comment which attests the continued interest of the public in matters social and sanitary. From the introductory address of Lord ROSEBERY down to the least pretentious communication to the sections, the papers were of more than average merit. His lordship, indeed, has won his spurs in a field in which we hope he will long continue to shine. In spite of some crude speculation, and a slightly pessimist view of human nature, Lord ROSEBERY placed before his audience a very complete and impressive picture of our social condition and its remedies. Education, in that higher sense which includes the study of man's organism in relation to surrounding objects, is the instrument to which he looked for all ultimate amelioration—a view in which he was still more pointedly supported by Lord NAPIER and ETTRICK, whose solid if less ornate exposition was a gratifying testimony to the progress of sound ideas on social subjects in the legislative mind.

The address, however, which attracted most attention, was deservedly that of the Right Hon. LYON PLAYFAIR, and we welcome it, not only as its author's best public performance, but as an effective auxiliary to the furtherance of those views on hygiene which have long been vindicated in these

columns. The vigour with which he pressed the duty of cleanliness, whether personal or public, was by no means in excess of the occasion. Great as is our superiority to the past in this virtue, there is still much need for improvement even among our middle classes. This is more particularly the case in large towns, where the deposit and accretion of sordes are in inverse proportion to the means of removing it. We are greatly deficient in that ablutionary apparatus in which the Greek or the Roman delighted, which kept them, on the whole, remarkably free from epidemics, and which was prescribed by a respect for the body, which, strangely enough, disappeared for centuries with the pagan. The religious ascetic who succeeded him made a virtue of crucifying the flesh, of neglecting the body and mortifying the mind, which worked disastrously on the physical and mental condition of the communities he guided. For a thousand years after the downfall of classic Rome, not a man or woman in Europe ever took a bath. In the time of the Stuarts and the Tudors the middle classes lived as scarcely the poorest Irish peasant consents to live at the present day. The earthen floors of their houses were strewn with rushes, which got saturated with broken victuals, which remained to putrefy under a new layer of rushes, till the petre-man came to dig saltpetre out of the floors. The result is known to every reader of Defoe, till the great fire of London administered its stern but wholesome lesson, coming as it did, like a strong sanitary agent, to stamp out the plague-spots and fever-preserves of the metropolis.

With the growth of purer ideas and habits as to the treatment of the body, public opinion will demand better means of carrying them out. This demand is already too imperious for the Legislature to ignore, and the Prime Minister in a memorable deliverance at Manchester fairly committed himself to meet it. Dr. Playfair believes that in thus pledging himself Mr. Disraeli expressed a deliberate and mature conviction. What, indeed, could be a fuller confession of administrative faith than this: "I think public attention should be concentrated on sanitary legislation. I cannot impress upon you too strongly my conviction of the importance of the Legislature and society uniting together in favour of those important results. After all, the first consideration of a minister should be the health of the people." Statesmanlike words, but difficult of realisation unless the existing machinery of public health be thoroughly reorganised. Well did Dr. Playfair condemn the recently manifested disposition to distrust the doctors in the administration of the Health Acts and work the Acts themselves, at least, at head-quarters, by lawyers and others not connected with the medical profession. "It is well known," says he, "that the Local Government Board are afraid of the doctors in the administration of Health Acts. Who but them possess the knowledge? I can testify, from an experience of thirty years' sanitary work—and impartially, because I am not in the medical profession,—that there is not a class of men in the country who labour so zealously for the prevention of disease as the doctors. Certainly their private interests have never been allowed to stand in the way of their efforts to uproot disease, although their living depends on its existence. Why, then, this vulgar distrust of the doctors in the administration of our Health Acts? Extend this prejudice against technical knowledge and how absurd it would be." The present Government will do well to give serious attention to this telling exposure of a fundamental defect in our sanitary system, and if its able chief will but remove it and place the Local Government Board on a really efficient footing, he will earn not only the applause which Dr. Playfair promises him from the Social Science Congress, but the gratitude and support of the medical calling and of the country at large.

It seems at last as if the Manchester Co-operative Dispensary Scheme is really about to become something more than a paper one. *The Times* devotes a whole column to an account of it, and says that a fund is all but raised for guaranteeing the cost of a three years' experiment. The sum necessary for this purpose is £1000 a year. Our readers have had many descriptions of the essential features of this scheme. The problem to be solved in Manchester, as in every community, is to provide the working classes and the poor who are not obvious and actual paupers with a machinery, the expenses of which shall be chiefly defrayed by themselves, and which shall supply them with medical attendants of standing, to be chosen by themselves. This want has been very creditably though partially met in a few places by the establishment of provident dispensaries, as in Northampton and Coventry, and in some parts of London, as in Camberwell, Haverstock-hill, &c. But the Manchester scheme differs from all former experiments in being more complete, not to say pretentious. In other places the provident dispensary is an isolated institution, competing with and struggling against a system of somewhat indiscriminate medical charity. But in Manchester the whole system of medical charity will be made to co-operate, not to compete, with the provident dispensaries. The existing free hospitals and dispensaries have promised their aid, and, especially, to supply daily lists of the names and addresses of the applicants for out-door medical assistance to the officials of the provident dispensaries. The condition of the applicants will thus be ascertained; and if it shall appear that they are capable of contributing systematic small payments, they will be referred by the purely charitable institution to the provident one. According to *The Times*, the "highest order of medical and surgical skill" is to be placed at the disposal of the members of provident dispensaries, who will also be entitled, in case of illness, to a recommendation to any hospital which may seem suitable to their case, and to the luxury of a dentist when necessary. These are great *quids* for a very small *quo*; and if the working classes of Manchester are as shrewd as they are supposed to be, they will to a man join one of the six district dispensaries which are to be established in Manchester and Salford, and one of which is to be opened immediately. The sum to be paid is one penny a week. Men with large families are to be let off easily by the rule that the subscription for all children under thirteen years of age in any one family is not to exceed twopence per week. It must be allowed that these are easy terms on which to secure the "highest order of medical and surgical skill." If anybody is to complain of them it will not be the working

man, but the hard-working doctor, who is to attend all the children under thirteen years in a family for twopence per week, which in a time of summer diarrhœa, or winter bronchitis, or epidemic outbreak, will not be a sinecure. It is the least satisfactory part of this scheme that the doctor is only to receive half of the payments of members, the other half going to pay for drugs and surgical appliances. We have already expressed our disapproval of this rule. The doctor is badly enough paid in existing dispensaries. And Manchester should not set the bad example of paying him on a lower scale. This, however, is partly a domestic question between the profession in Manchester and the gentlemen who are most praiseworthily trying to carry out this experiment. When it was first announced we expressed our belief that it would be something on a large scale, and to be studied. The period of incubation has been long. The scheme has a difficulty in getting off paper into actual life. But we shall watch it with a kindly if not an uncritical eye.

Medical Annotations.

"Ne quid nimis."

THE NAVAL MEDICAL SERVICE.

IN his introductory address at University College on the 1st October, Dr. F. Roberts referred very pointedly to the unsatisfactory condition of the Naval Medical Service, and this state of things was still more forcibly taken up by Captain Bedford Pym, R.N., in returning thanks for the navy at the dinner of the Middlesex Hospital Medical College. Captain Pym boldly acknowledges that the surgeon does not hold his proper position in the navy, and advises the medical profession "to bring the Admiralty to a right frame of mind by shutting the doors of the hospitals and medical colleges in their faces." Captain Pym has recently been returned to Parliament, and having been at one time a student at the Middlesex Hospital, we trust we may look to him for his energetic support of the claims of the public medical services. He must be well aware that the difficulty lies principally at the door of the executive branch of the naval service, the members of which are content when juniors to put up with treatment which would not be borne in any other service, in hope of one day becoming seniors themselves and reaping their reward. We have no hesitation in saying that while the condition of the crews has been greatly ameliorated of late years, simply because seamen were scarce, the relation of the junior to the senior officers in the navy is precisely what it was in the old war-time. A captain, who is still received on board his ship with bare head by a lieutenant as old or older than himself, and who even on social occasions is always addressed as "Sir," cannot be made to understand how galling the restrictions of the service may become to a grey-headed staff-surgeon who very probably was at sea before his captain left school. Of what possible utility can it be that the officer of the watch, who may be a young sub-lieutenant or even a midshipman, should be informed with a salute that the "doctor" has come on board; or what benefit do the sick derive from the daily report of their number to the commanding officer at "quarters"? Let Captain Pym try to get some of these "traditions of the service" relaxed in favour of the doctors, and it will then not be necessary to have recourse to the perfectly feasible system of "lock-out" which he suggests.

DEATH BY THE GUILLOTINE.

SCIENCE would almost seem to be as tardy of growth as moral principle in some quarters, if we may judge from the arguments against death by decapitation which have been revived in connexion with the recent executions in France. Poirier, the Limours murderer, and Moreau, the herbal-poisoner of St. Denis, were both guillotined last week, and forthwith the Parisian press inveighs against that mode of execution, citing the old experiments of Dr. Sue (the novelist's father), and even advancing as "la plus frappant preuve" that the decapitated head feels and thinks, "la joue de Charlotte Corday rougissant sous le soufflet du valet de l'exécuteur." Our readers may possibly remember that rather less than four years ago we had to refute the theory of Dr. Pinel, that Tropmann's head, having lost under the guillotine the sources of common sensation, yet retained hearing, sight, and smell, with the whole apparatus of consciousness and intellect. The trunk, he maintained, died quietly and painlessly from hæmorrhage in the course of a few minutes; but the brain, shielded by atmospheric pressure, retained its blood, and consequently its life, for no fewer than three hours. It is still necessary, it seems, to reassert the fact that, while the brain possesses a considerable quantity of blood after decapitation, the blood rapidly becomes venous for want of oxygen; the condition being like that in complete asphyxia, in which consciousness vanishes in ninety seconds. The physical shock sustained from the guillotine would of itself, moreover, paralyse all nervous function too completely to admit of consciousness taking place during the brief interval necessary for the thorough deoxidation of the blood in the brain. Beyond the momentary impact of the descending knife on the felon's throat, no further sensation can be felt. Indeed the mode of execution is so painless as almost to weaken the deterrent force of capital punishment; certainly to deprive those who would abolish that punishment of any argument deducible from the "horrors of the guillotine."

THE NEWCASTLE INFIRMARY.

IT will hardly be a matter of surprise to our readers that the letter of Mr. C. S. Jeaffreson on the Newcastle Infirmary, which appeared in THE LANCET of Sept. 26th, has led to that gentleman's resignation of the office of assistant-surgeon to that institution. A quarterly meeting of the governors of the Newcastle Infirmary was held on Oct. 1st, when Mr. Jeaffreson's letter of resignation was brought under discussion, and statements were made by Dr. Armstrong and Dr. Heath, two of the surgeons of the infirmary, which appeared to put a different complexion on the case.

We gather that when the question of appointing assistant-surgeons to the infirmary was mooted some time back, it was intended to appoint only two such officers, but eventually it was decided to appoint four—one to each surgeon,—and Mr. Jeaffreson was the junior, and acted with Dr. Armstrong, the senior surgeon. Dr. Armstrong spoke openly of himself as "the unfortunate surgeon Mr. Jeaffreson was attached to," and proceeded to give that gentleman a character which, if deserved, fully explains his non-agreement with his colleagues. According to Dr. Armstrong, "Mr. Jeaffreson made himself extremely obnoxious in the wards, was continually speaking to the students about the mismanagement of this and the mismanagement of the other; and the result was that, in order to have peace of mind, and not to be kept in a constant turmoil in the house, he (the speaker) felt it his duty to do his work himself. He did not think, after this, that the governors would complain that he took charge of the wards himself, and took particular care not to leave home for any sufficient length of time as to give any-

one charge of his patients. If, as Mr. Jeaffreson stated, the out-patients of whom he had charge had diminished in number since he took charge of them, it was not a very flattering compliment to Mr. Jeaffreson himself. The other assistant-surgeons did not make that complaint; they saw they had work to do and they did it. Mr. Jeaffreson had never come to assist him or his patients, except once, since he became assistant-surgeon. He got notice every time operations were to be performed, but he never came to assist; the other assistant-surgeons did come and assist."

We cannot enter into the details of a case of injured foot which was under Dr. Armstrong's care, but which Mr. Jeaffreson wished to amputate till prevented by the house-surgeon, for Mr. Jeaffreson has published a letter in the local paper denying Dr. Armstrong's statement, and we have no means of judging between them.

Dr. Heath's statement to the Quarterly Board dealt not with personal matters, but with the grave charges brought against the infirmary, both in these columns and in a local paper, by Mr. Jeaffreson. He showed that so far from the infirmary being an unsuccessful institution, the operations were more successful than in many London hospitals. The great majority of the cases were "terrible and violent smashes, not ordinary fractures or injuries requiring amputation"; and he proceeded to state very ably the difficulties of treating such cases:—"When a surgeon was brought face to face with a case of this kind he had a serious question before him. If he did nothing with the case at all, the man died without a doubt; there was a chance of recovery if an operation were performed, although the chance was very small. But the surgeon looked to the good of his patient, and was anxious merely to save life. He did not look to make a good list of statistics to show the public. He performed the operation, and if he saved one life out of twelve such cases, was it not worth his while to operate?" Dr. Heath said that in five years there had been 139 cases of amputation with 66 deaths; but then no less than 70 per cent. of these had been of the class described above, and 15 had been double amputations, of which only 2 recovered. Last year there had been in the infirmary 18 cases of amputation of the thigh, with only 7 deaths; and during the last five years 30 cases of lithotomy, with only 1 death. In answer to a governor, the house-surgeon, Dr. Page, replied that 38 of the 169 deaths last year occurred within forty-eight hours of the patients' admission, thus proving the severity of the injuries received.

We learn that Mr. Jeaffreson's letters have been referred to the Medical Committee for a reply, which we shall be happy to receive for publication.

ANATOMY OF THE TESTIS.

THE anatomy of the testis has recently undergone careful re-examination at the hands of Dr. Victor v. Mihalkovics, and the results of his researches appear in the last part of the "Arbeiten" or "work done" in the Physiology Laboratory of Ludwig, at Leipzic, in 1873. The conclusions at which Dr. Mihalkovics has arrived, which partly agree with, and in part differ from those of previous observers, are as follows:—In the first place, he finds, in opposition to the greater number of authors, as Müller, Krause, Beale, Sappey, Kölliker, v. Luschka, and Lavalette St. George, that the tortuous terminal or peripheric portion of the tubuli seminiferi forms a plexus by the anastomoses of their numerous dichotonous divisions. The ultimate branches appear to be connected by loops. In man, the canals in the cortical layer present small bead-like projections of the wall, and never begin, as most of the above-named authors contend, by closed free extremities. In regard to the structure of the walls, he believes Henle is most exact in stating that it consists of a series of laminæ or membranes with flat nuclei. The size of the tubuli bears no relation to that of the testis, since in the guinea-pig it is 0·10; the cat, 0·11; in the cock, 0·12; mouse, 0·15; rabbit, 0·20; goat, 0·20; man, 0·21; dog, 0·25; bull, 0·26; and rat, which is the largest of all, 0·40 of a millimetre. Secondly, the straight portions of the tubes, or vasa recta, are not direct continuations of the tortuous portions, but are of very much smaller diameter, and are lined by a much shorter columnar epithelium. They run in the connective tissue of the corpus Highmorianum or in the lowest parts of the septa. Thirdly, the supporting cells, described by v. Merkel, and germ plexus are, he thinks, artificial products, which owe their existence to the coagulation of a tenacious albuminous substance occupying the interspaces between the seminal cells. Fourthly, certain interstitial cells are constituents of the testis, the analogues of which are discoverable in many other organs, as the supra-renal capsules, the sacral and carotidean glands, the corpus luteum, and pituitary body. Fifthly, the connective tissue of the testis consists of various-sized trabeculæ of connective tissue, which form a network and are covered by an endothelial layer of cells, which last is continued from them on to the seminal tubules and bloodvessels. Sixthly, the lymphatics commence in the interspaces of the fasciculi of connective tissue invested by endothelium, and partly in the lacunæ of the lamella of the walls of the seminal tubules. No true tubular lymphatics with defined walls exist in the testis at all. Lastly, the tubuli seminiferi are closely surrounded by a layer of capillary bloodvessels, intimately connected with the membrana propria.

SANITARY NOTES.

As the enormous importance, in a sanitary sense, of obtaining a good supply of water, both as to quantity and quality, is gradually becoming recognised, and the scarcity of the article has already become a practical experience in most quarters of England, we are enabled to glean some curious bits of evidence as to the sanitary condition of the rural population. Mr. Arnold Taylor, one of the inspectors of the Local Government Board, was, some few days ago, sent down to hold an inquiry at Bedlington, because the authorities of this town and the surrounding districts wish to borrow money for water purposes, in accordance with the provisions of the Public Health Act. The district comprises a population of 17,000 persons, and about 9000 acres. The inhabitants pay rates varying from 7*d.* to 2*s.* in the pound for a supply of water that often does not exist, and appears to be nearly always more or less polluted, so that many of the inhabitants are compelled to get up at three or four in the morning in order to walk some distance for their daily water-supply. "Steam" water from the collieries is sometimes used; water is bought from carts at the rate of a halfpenny a can, and a witness deposed that "tea" water alone cost the household 7*d.* per week. The water obtained from mines in the neighbourhood is drawn out of the "sump," and is, of course, polluted by the refuse of the stables below. As to the water which the inhabitants are supposed to receive, and for which they are rated, it seems that empty tanks for days together are the rule rather than the exception; and so we trust, if the proposed water-supply can be obtained from a pure source, and due care is taken to store it properly, that the inhabitants of Bedlington will have an opportunity of getting their 3½ per cent. loan without loss of time.

Dr. Sedgwick Saunders, medical officer of health for the City, has recently submitted to the Commissioners of Sewers a report on the constant supply of water in the courts and alleys comprised in his district. The report re-

cites that in many quarters of the City the water-supply is so limited that the same water is used for washing skins and clothing, and that water for cooking is used several times over. The cisterns are in many instances foul and delapidated, and placed directly over the privy common to a household consisting of several families. Up to the present time the Commissioners have erected 11 standpipes, the Jewish Board of Guardians 2, and a private landlord 1, of which 7 are in the east district, 4 in the middle, and 3 in the west district. Dr. Saunders says that these standpipes are very popular and largely used. He recommends the erection of 25 standpipes for the use of 234 houses in the east district, 20 pipes for 149 houses in the middle, and 20 pipes for 153 houses in the west district, making a total of 65 for 536 houses situated in fifty courts and alleys. It is proposed that this constant supply shall be supplemental to, and not a substitute for, the ordinary intermittent service.

THE SOCIETIES.

WITH the dawn of October, and the opening of the schools, comes the session of the Societies. The eminently respectable Medical Society, the dignified "Medico-Chi," the odoriferous Pathological, and the juvenile Clinical all have their special supporters, whose delight it is to air professional rhetoric in one or the other arena. "'Tis pleasant sure to see one's name in print," but it is easy, in glancing over the records of the Societies, to see that the speakers are confined to a comparatively small coterie. The larger proportion of those who frequent the meetings either cannot or will not speak, or, as we suppose, come to listen and learn, so that the talking is done mainly by a few well-informed speakers, supplemented by a larger number who are ready to get up and say something upon any and every conceivable subject. The results are not always satisfactory, and so-called dull evenings are as much the rule as the exception. It appears to us that the success of any society founded for scientific purposes must hinge largely on the sort of material sought for and chosen by the secretaries, and that too little care is taken to separate as a preliminary matter the wheat from the chaff. We cannot always expect discussions equal or nearly equal to those that occurred on many evenings last winter, but much good might be done by making a better choice of subjects, and limiting both readers and speakers to the time allowed. We propose this season to initiate a somewhat new mode of reporting the Societies, and hope that the "reported" will find it a change for the better.

HEALTH OF KENSINGTON.

DR. ORME DUDFIELD has just issued an instructive and interesting report of the sanitary condition of his district during the year 1873. We may premise that the parish of St. Mary Abbott's, Kensington, contains an estimated population of 133,000. There were registered during the year 2436 deaths, of which number 96 occurred in the Brompton Hospital for Consumption. Deducting the deaths of strangers in that institution, the annual rate of mortality was 17·6 per 1000. Although towards the close of the year an epidemic of measles visited the district and was accredited with 38 deaths, the zymotic diseases generally may be said to have been in abeyance. One death only occurred from small-pox, and the circumstances of this death (a young married woman) displayed the most deplorable ignorance and neglect; and incidentally the need of a mortuary for the parish. No application was made for medical attendance, and the patient, after lying in a garret without any means of ventilation or heating for twelve days, died without having been seen by a doctor. Dr. Dudfield endeavoured—very properly, as we think—to procure an inquest, but was unsuccessful. The year was marked by a remarkable "endemic" of sore-throat, which commenced about the middle of August, attained its height in September, and continued more or less prevalent until the end of the year. The disease was ushered in by ordinary febrile symptoms; the throat became red and swollen, with external swelling and tenderness, usually affecting the cervical glands and occasionally the parotid. There was an abundant glairy secretion, which produced a sense of suffocation in the recumbent posture, with pain during deglutition; occasionally there was a slight measly rash, and a diphtheritic-like exudation on the tonsils. "The tongue was not that of scarlatina, and there was no cuticular desquamation." In many cases the urine was albuminous and sometimes bloody. The principal sufferers from the disease were well-to-do people living near open spaces, the poor of the crowded courts enjoying comparative immunity. Although many of the affected suffered very severely, it does not appear that the complaint was fatal in any case.

The outbreak, which was altogether a most strange one, has now entirely disappeared. Puerperal diseases and childbed accidents caused 29 deaths, 23 of these being from puerperal fever chiefly occurring in private practice. Some of the women had been attended by unqualified practitioners and midwives. Twenty-one deaths during the year were "uncertified," or, in other words, had been attended by unqualified persons. Dr. Dudfield suggests that the use of the official death certificate by any other than legally qualified medical men should be made an offence under the Medical Registration Act.

THE ORIGIN OF THE TRANSFUSION OF BLOOD.

DR. CHEREAU, the talented paleontologist of *L'Union Médicale*, well versed in chronological researches, has published in two late numbers of that journal (Nos. 108 and 110, 1874), interesting articles in which he strives to prove that the first idea of transfusion originated in France. It was first suggested by a friar named Robert des Gabets, in 1651. The latter states that another friar, named Eloy Pichot, gave him the idea, upon which the former had two silver canulæ constructed, connected with a leather pocket the size of a walnut, the canulæ being provided with valves to prevent regurgitation. Seven years afterwards, Des Gabets gave a lecture on the subject at a conference held at a nobleman's house, where many foreign gentlemen were present, especially Englishmen. The inventor, however, never practised the operation which he had suggested, and we find that, in the Philosophical Transactions of London of Nov. 19th, 1666, the success which attended the transfusion of blood from one animal to another is mentioned, Lower being the operator. In 1667, Jean Denis, of Paris, assisted by Emmerez, performed transfusion, first from one animal to another of the same species, then different species were used, and the operation was modified so as to transfuse arterial blood into veins, and *vice versâ*.

On the 15th of June, 1667, the same surgeons ventured upon man, first upon a young patient suffering from fever, and who had been bled twenty times to mitigate pain. The carotid blood of a lamb was used, and successful results were obtained. In the second place a porter was hired for the experiment. He received into his veins about twenty ounces of the arterial blood of a lamb; and was pleased with the operation.

In Sept. 1667, the Philosophical Transactions contained a paper in which the discovery of transfusion is claimed for Great Britain; and on Nov. 23rd, 1667, transfusion was first

performed in England, upon a man called Arthur Coga, a lamb also furnishing the blood. Hence Dr. Chereau states that to France must be left the honour of having emitted the idea, to England the merit of having first put it into practice. The author of the article very carefully and minutely adds all the necessary references. He also proves, by original documents, that transfusion was never actually forbidden in France, as has been stated. The authorities only insisted upon certain precautions being observed.

JUSTICES' MEDICAL LAW IN DURHAM.

A VERY remarkable decision has been given by the magistrates of the Durham County police-court in the case of Mr. John Fisher Le Page, practising as a doctor at Brandon Colliery, near Durham, and using the titles of "Physician and Surgeon" on the strength merely, according to Mr. Brignall, who prosecuted, of the qualifications of a pharmaceutical chemist. Nothing would seem to be a more audacious and obvious breach of the 40th clause of the Medical Act than for a chemist to call himself physician and surgeon on the strength of a licence to practise pharmacy. And it was clearly proved that Mr. Le Page did sign certificates attaching these titles to his name. The counsel defending admitted the signing of these certificates as described, but denied that Mr. Le Page's name not being in the Register was evidence that he was not duly qualified. In defence of this position he relied chiefly on the judgment of Mr. Chief Justice Erle in the case of Pedgrift *v.* Chevalier (*Law Times*, vol. ii., p. 360). He quoted the case of Steele *v.* Hamilton tried in November, 1870, in support of this view. The Bench decided not only to dismiss the case, but refused an application for leave to take the case before a superior court. This decision is a complete *reductio ad absurdum* of the 40th clause. Under the protection of it any person may use the titles which the 40th clause forbids to be used falsely without fear of being convicted by the Durham magistrates. The case is different from that of Steele *v.* Hamilton, in which the defendant used the titles "Botanic Surgeon, Boston," &c., and underneath "J. Hamilton, Surgeon," put in very small letters "Boston, U.S.". There was some escape here, though a very unsatisfactory one, from the charge of falseness in the use of English titles, and the evidence was considered insufficient. But to apply this decision in exoneration of a chemist using the titles of physician and surgeon without any qualification seems to us a very serious matter, the more serious for being coupled with a refusal to allow the case to be taken to a superior court. The promoters of this most reasonable prosecution will do well to lay the facts of the case and the judgment of the Bench before the General Medical Council.

THE DENTAL HOSPITAL.

THE first public distribution of prizes to the successful students of the Dental Hospital of London Medical School took place on Monday last, in the lecture-room of the handsome building recently opened on the south side of Leicester-square. Mr. Savory, F.R.S., who is one of the Board of Examiners in Dental Surgery at the College of Surgeons, presided on the occasion, and was supported by all the leading members of the dental profession and many hospital surgeons, besides the friends of the pupils, including many ladies. Mr. T. A. Rogers, the dean of the school, opened the proceedings by a statement setting forth the increasing prosperity of the school and the good conduct of the students, and the several lecturers then introduced their prizemen, who received their prizes from the hands of Mr. Robinson, Mr. Underwood, Mr. De Morgan, and Mr. Cartwright. Mr. Savory, in addressing the meeting, took occasion to congratulate the prizemen on their success, and maintained that though the "prize-system" might be carried to excess, yet that prizes were good as incentives to exertion, and that the thorough work necessary for gaining a prize could not but help forward education. He believed that prizemen in schools and colleges were often the successful men in after life, and decried the so-called "practical man" who could do nothing without looking for immediate reward. He urged continuous and steady work as the best guarantee of success, and after a graceful allusion to the presence of ladies, took occasion to remark that possibly ere long the dental student might find himself in competition with fellow-students of the fair sex. A vote of thanks to Mr. Savory, proposed in eloquent terms by Mr. Edwin Saunders, was carried by acclamation.

ELIE DE BEAUMONT.

THIS eminent philosopher died suddenly on the 26th ult., at his country seat, aged seventy-six years. In 1819 the deceased left the Polytechnic school first on the list, and as early as 1825 he was appointed to take a share in the drawing-up of the geological map of France, which map is not yet completed. It may be said that M. de Beaumont continued these labours up to his death. Some portions of them were produced at the Paris Exhibition of 1867. The author was a member of many scientific societies, especially of the Royal Society of London (1835). He entered the Academy of Sciences of Paris in 1835, and became permanent secretary at the death of Arago. M. de Beaumont held many scientific appointments in France, such as Inspector of Mines, Professor at the College of France, and he had been raised to the rank of Senator, after having obtained the order of Grand Officer of the Legion of Honour. His principal work is entitled "Researches on some of the Revolutions of the Surface of the Globe." It is he who established the view of synchronism in the formation of mountains, which took place in a direction parallel to a great circle of the globe. Most of his other works refer to statigraphic geology and to the classification of the successive sedimentary formations, according to the direction of the risings which they have experienced. He has in some way symbolised the scientific labours of his life by a geometrical figure, to which he has given the name of "pentagonal network," which yields the explanation of the arrangement of the mountains all over the earth.

PREVENTABLE DISEASES AFLOAT.

WE have had recently in the port of London what may fairly be called a "scurvy revival." Three vessels have lately returned from India with scurvy-laden crews. In one case, the entire crew, consisting of twenty-one Lascars, were affected; and in a second, eight or nine men, also Lascars, out of a crew of some twenty-five or thirty all told, were victims to the disease. All these vessels made, comparatively speaking, long passages; and the causes of the outbreak have, in two out of the three cases, been made the subject of official inquiries by the Marine Department of the Board of Trade. It is proper, however, that we should try to account for this serious and sudden increase in what has for the past five or six years been considered a moribund disease, except of course in times of war and famine. Until within the last two years ship captains had for some time given up the plan of bringing Lascar crews to England, because so many died or were invalided on account of pulmonary complaints, and it was thought that among Asiatics our fickle climate predisposed to tubercle. But the opening of the Suez Canal and the extreme scarcity of seaworthy sailors have combined to favour the engagement of Asiatic crews

again. We believe that at the present time all the steamships of the Peninsular and Oriental Company are manned with them, as well as many other large East Indiamen that may be found any day in the Millwall or Victoria Docks; indeed, the number of Lascars is so large that the dock companies have, by the advice of the port medical authority, provided special accommodation for them ashore. We have been at some pains to ascertain whether the theory above mentioned is real or fanciful, and practical experience gleaned afloat now leads to the latter opinion. Colonel Hughes, the energetic honorary secretary of the Home for Asiatics in Limehouse, says that Lascars can be kept in good health in London if they are well fed and warmly clothed; and, speaking from the experience of more than half a century, he is probably right. *Apropos* of scurvy, therefore, it appears that, if Lascar crews are brought to this country, or engaged for long voyages at all, as much care should be taken of them, as to hygiene and antiscorbutics, as of European seamen. Their diet is far simpler than ours and very much cheaper, so that the difference in cost of maintenance should be expended in furnishing them on this side of the Suez Canal with warm and suitable clothing. It will be a disgrace to the mercantile marine of this country if scurvy revive among our crews; and it is, therefore, the duty of the Board of Trade to discover and punish rigorously all breaches of the Merchant Shipping Acts that relate to the health of crews.

HOSPITAL SUNDAY IN DUBLIN.

ON November the 15th collections are to be made in Dublin in 102 churches on behalf of the hospitals and other medical charities of Dublin. The movement, elsewhere so successful, is not likely to fail in Dublin. It is said, indeed, that the representatives of some of the charities in Dublin are offering opposition to the movement, from the feeling that it is likely to curtail the annual subscriptions. Some men never are equal to a new development of existing machinery. It is a strange fear that to direct the public attention on a large scale to the claims of hospitals should have the effect of injuring them. Moreover, it is one quite rebuked by experience. Surely the shrewd men of Birmingham, Glasgow, Liverpool, and other places would have discovered this working of Hospital Sunday, and long ere this abandoned it. Instead of this, the institution extends to new places and grows yearly in fruitfulness where it has been established. Even in London, where the work of distribution has been done very indifferently, the second year shows an advance of £2000 on its predecessor.

THE GROUSE DISEASE.

THE controversy respecting this disease is not by any means settled, nor is it likely to be so unless fresh and more sustained investigations are made. Looking to the facts as they now stand, and at the same time discarding all the more absurd opinions that have appeared in our sporting contemporaries, two views of the case are thrust upon us. Either we are to believe, with Dr. Cobbold, that the disease is due to the presence of parasites, or with Dr. Farquharson, that the birds suffer from a specific fever of an infectious kind. These observers are agreed as to the prevalence of entozoa in affected birds, but their separate interpretation of the facts is widely different. As the question now stands, the parasitic view appears to be gaining ground, owing, probably, to its strong advocacy in the article that recently appeared in *The Times*. Here, however, we do not care to repeat the arguments either for or against this or that view; our object being rather to point out what remains to be done in the way of research, prevention, and cure. Remedies as medicines can only be employed with difficulty. The suggestion of "M.D." in *The Times*, that "small covered depôts of salt" should be formed in heather-producing districts, is a very admirable one; but it is not so certain that the birds will be wise enough to know their advantage. To be sure, some animals seem to have an almost intuitive notion as to what is good for them, and this in the case of pigeons is especially observable as regards their fondness for salt. Possibly the recent epidemic affecting the Antwerp smerles might have been averted if the birds had been more liberally provided with salt. This pigeon murrain, if we may so term it, was undoubtedly due to entozoa of the nematode type. But on many grounds the grouse murrain calls for further investigation; and this effort should be conducted by means of all the most modern appliances which can be brought to bear upon it.

THE ARRIS AND GALE LECTURESHIP.

WE learn from the College of Surgeons' Calendar that Professor William Turner, of Edinburgh, has been appointed Lecturer in Anatomy and Physiology on the Arris and Gale foundation. The appointment is an unexceptionable one, and we congratulate the Fellows and Members of the College on the prospect of a course embodying that original research in both human and comparative anatomy and physiology for which the Edinburgh professor has long been known. We hope to place these lectures before our readers *in extenso* in due course.

It will be remembered that at the annual meeting of the Council of the College of Surgeons in July last, this lectureship was not filled up, owing to the two candidates for it having withdrawn at the last moment. Under these circumstances, the lectureship was offered to Professor Turner, who is a Member of the English College, and having been accepted by him, the appointment was made at the ordinary meeting of the Council in August. The proceedings of that meeting of Council have not yet been confirmed, and this is, we presume, the reason why Mr. Turner's name does not appear in the capitals denoting existing tenure of office.

HOW SCARLET FEVER SPREADS.

A LABOURER, John Davenport, of Cadishead, was, according to the *Manchester Guardian*, charged by the Inspector of Nuisances for the Barton Rural Sanitary Authority, under the Public Health Act, with allowing his two children, ill on the 17th of September with scarlet fever, to be out and to play with other children on the 22nd. The medical officer of health spoke to the nature of the disease, but the case broke down owing to another medical man, who shall be nameless, maintaining that one of the children had not scarlet fever, though he could not say what the eruption was. He appeared to admit the scarlatinous character of the other case, but maintained that it was not in an infectious state. We should have imagined it to be impossible for any medical man to think that a scarlatinous patient is not "in an infectious state" after a few days.

THE PORTSEA UNION.

WE regret to find that the guardians of the Portsea Union have proceeded to the extreme step of suspending their medical officer, Dr. Diver, pending an official inquiry into some alleged irregularities in connexion with the post-mortem room of the union. The bare suspicion of any tampering with the "sanctity of the grave" creates so much strong feeling on the part of the more illiterate portion of the community that we are not surprised at the indignation excited among the guardians by the statement that corpses of

paupers had been unlawfully "cut up." Dr. Diver, we observe, denies that anything but "*post-mortem* examinations" had taken place, and we think the guardians would have some difficulty in proving that any of the proceedings they complain of did not properly come under that head.

May we suggest to them that, even supposing it to be proved that their medical officer has performed "operations" on the bodies of friendless paupers, yet that, as he has to perform similar operations on the living inmates, he may have been perfectly justified in gaining by practice on the dead body the experience necessary for the skilful operator?

MODE OF ACTION OF SOME EMETICS.

M. CHOUPPE has lately made some interesting observations in M. Vulpian's laboratory on the action of certain emetic substances—namely, tartar-emetic, apomorphine, and ipecacuanha, with its active principle, emetine. Two opinions have been expressed in regard to the mode of action of these substances when introduced into the general circulation, some conceiving that they only act at the moment of their elimination on the peripheral extremities of the nerves, whilst others believe that they act whenever they accumulate in sufficient quantity in the blood circulating in the medulla oblongata to start the co-ordinated movements which produce vomiting. M. Chouppe's experiments lead him to think that both views are sometimes true, sometimes erroneous. He divided the pneumogastric nerves in dogs, and after permitting the efforts to vomit resulting from the operation to subside, he injected subcutaneously, or into the veins, an emetic dose of one or other of the above substances. He found that the previous section of the pneumogastrics had no effect in the case either of the tartar-emetic or of the apomorphine, vomiting occurring just as freely as when the nerves were intact, whilst, on the contrary, with ipecacuanha or emetine no vomiting occurred in any instance. So, too, if, after emetine had been injected and some time had been allowed to elapse, a little tartar-emetic were injected, vomiting at once took place. A point incidentally observed in these experiments is worthy of note—namely, emetine causes vomiting much more quickly when it is introduced into the stomach than when it is injected into the veins, whilst exactly the opposite occurs with apomorphine and tartar-emetic. The conclusion to be drawn from M. Chouppe's experiments seems to be that tartar-emetic and apomorphine act both on the central nervous system and upon the gastric mucous membrane, whilst the action of emetine seems to be limited to the peripheric extremities of the vagus.

HOSPITAL SATURDAY.

THIS movement is promising to have more success than in its origin it promised to deserve. The disjunction of Hospital Saturday and Hospital Sunday has never had our approval; but practical men must accept facts. Whatever the machinery adopted for collecting the sums which working men are willing to contribute to our hospitals and dispensaries, there is no doubt that it is most reasonable that they should contribute a very large sum to these institutions by which they chiefly are benefited. The meeting at the Mansion House shows that, notwithstanding the independent action of Captain Mercier and his associates, there is nothing but good-will on the part of the Hospital Sunday Council to the Hospital Saturday movement. And we shall be glad if the sum collected on the 17th inst. be so large as to prove the confidence of the working men themselves in those gentlemen who have placed themselves at the head of this movement.

THE ANNUAL DINNER AT ST. BARTHOLOMEW'S HOSPITAL.

DR. GEORGE ROLLESTON presided very successfully, on the 1st inst., at the old students' dinner which is annually eaten in the Great Hall of this ancient foundation. The company numbered about 100, and included Sir George Burrows, Dr. F. J. Farre, Dr. Stenhouse, Professor Abel, Dr. Black, Dr. Thomas Green of Bristol, Mr. Terry of Northampton, Dr. Matterson of York, Dr. Drage of Hatfield, Dr. Charles Wotton of Langley, and many other men from the provinces who sustain conspicuously the reputation of their school. The speeches from the chair were remarkably suggestive of the *alma mater* of its occupant, which has in him a very happy representative. Mr. Willett and Mr. John Langton organised the arrangements with their accustomed skill and care, and a very enjoyable evening was the result.

CORPORAL PUNISHMENT.

MR. PATTESON, the Woolwich police-magistrate, has decided that the punishment inflicted recently upon the head, neck, and shoulders of a schoolboy by a master in that neighbourhood was "not excessive, or such as a jury would think unjustifiable," and therefore dismissed the summons. We quite admit that the boy deserved punishment, and that the master was grossly aggravated by his rebellious conduct; but we cannot think blows with a cane about the neck and ears a safe or justifiable punishment, and would strongly advise recourse to a *vis a tergo* in the form of a birch rod in future.

THE new number of the *British and Foreign Medico-Chirurgical Review* strikes us as one of the best we have read for some time. The reviews and articles are decidedly above the average. In the first, on Recent Psychological Doctrines, a number of recent works on mental science and philosophy are considered, and Dr. Carpenter's views are freely criticised; but the writer promises a further article in continuation of his subject. The next article takes up the subject of Zymotics. Dr. Pavy's work on Food and Dietetics; Dr. Fordyce Barker's Lectures on Puerperal Diseases; the recent works on Fever, by Stokes, Murchison, and Budd; those on the modern treatment of Stricture, and other subjects, form the basis for articles all more or less good. The first part of Mr. Nettleship's paper on Granular Disease of the Conjunctiva and Contagious Ophthalmia is a contribution in which the subject is, we think, being very carefully worked out. This paper will be read with profit in connexion with the prevalence of ophthalmia in schools, and will probably call for some notice at our hands hereafter.

DR. SEPTIMUS GIBBON, in his report on the sanitary condition of the Holborn district, to which he is medical officer of health, makes some shrewd remarks on the subject of congenital syphilis. Although there was a reduction observable in the number of deaths so registered in the parish last year, as compared with the previous one, still the diminution was only apparent. Owing to defective registration, not a tithe of the mortality resulting from this distemper, so destructive of infant life, is really represented. Deaths due to hereditary syphilis are, in order to spare the feelings of friends and relatives, habitually certified to have arisen from some secondary disease, as convulsions, atrophy, &c. Dr. Gibbon hopes the Government will soon see its way to extend the Contagious Diseases Acts to all populous cities. In dealing with the Registration Act, Dr. Gibbon labours under some strange misapprehension. He appears to assume that medical men are paid for signing death certificates. It is very rarely indeed that payment for such service is solicited or offered.

WE regret to announce the death of Dr. William Webster Fisher, the venerable Downing Professor of Medicine, Cambridge, who died on Tuesday morning at his residence at Downing College after a long illness. The electors to the professorship are the Archbishops of Canterbury and York and the Masters of St. John's, Clare, and Downing Colleges. The professor must at the time of his election be a graduate in medicine of one of the universities of the United Kingdom, and not under twenty-five years of age. The professorship is not vacated by marriage or by the possession of any property, and the professor is eligible to hold any of the lay offices of the college.

AT the Homerton Hospital, 206 cases of fever were admitted during the past two months, of which 114 were of scarlet fever, 24 of enteric, and 29 of typhus. The scarlet fever patients chiefly came from the parishes of Holborn, St. George-in-the-East, and Bethnal-green. During the same period, 187 fresh cases had been admitted into the fever side of the Stockwell Hospital, of which 80 were of scarlet fever and 52 of typhus; no less than 30 of the latter came from Greenwich.

VITAL statistics of Alexandria and Cairo have recently for the first time been forwarded to the Registrar-General by Dr. Ardouin, physician to the European hospital in the former town. The returns are by no means satisfactory, the annual rate of mortality in both places being over 50 per 1000. It is to be hoped that henceforth weekly accounts of the health of towns so largely visited by English tourists and invalids will be furnished by the Egyptian Government.

WE have to record the premature death, on the 14th of July last, of Dr. Simon Belinfante, of Mudgee, New South Wales. Whilst in the act of crossing a river to visit a patient his buggy was overturned, and he was swept away and drowned. Dr. Belinfante had been a distinguished student at University College Hospital, where he obtained several prizes. He was M.R.C.S. Eng. and M.D. St. Andrews. After settling in New South Wales he was admitted to the Bar at Sydney in 1867, and subsequently practised law and medicine, displaying in both professions remarkable ability.

WE understand that the body of Lady Dilke, who recently died, has been taken over to Germany in order to be submitted to the process of cremation. It is impossible to doubt that the method of disposing of the dead advocated by Sir Henry Thompson is attaining popularity in this country, or that it will eventually supersede inhumation. Sir Charles Dilke has set a courageous example which we hope and believe will be widely followed as soon as a suitable establishment has been erected in this country.

THE Woolwich Board of Guardians lately advertised widely for a dispenser. Singular to relate, in these days of fierce competition, there was only one application received for the post, and that from a female, who, we are sorry to say, was considered by the guardians ineligible on account of her sex. There can be no possible objection to employing women as dispensers of medicine; it is a sphere of work in which they would probably display great aptitude and care.

THE mortality in London last week amounted to 1163 deaths, including 4 from small-pox, 8 from measles, 107 from scarlet fever, 8 from diphtheria, 16 from whooping-cough, 25 from different forms of fever, and 38 from diarrhœa. The fatality from scarlet fever exceeded that of any similar period since the winter of 1870-71, when it was epidemic in the metropolis.

WE are glad to be able to state that "Messrs. Gay and Co., of Fleet-street, have received orders from the General Post-office to paint the whole of the pillar-boxes a bright vermilion colour, the same as the mail carts, with their impenetrable paint, as they find it the best, having used it for three years. The chief object of the change is to clearly distinguish the letter-boxes from the iron rubbish-boxes with which our streets are adorned."

IT is intended shortly to so reconstruct the Hampstead Asylum that it will provide accommodation for 700 imbeciles, of whom about half will be children. School-rooms, workshops, recreation rooms, &c., will be added to the building.

THE Siberian plague has made considerable havoc at Tobolsk during June and July. No fewer than 4775 horses, 516 cattle, 1030 sheep, 52 pigs, and 15 goats have died of it. Even human beings have caught it, and 106 have succumbed.

IN view of the continued prevalence of scarlet fever in the metropolis, the Metropolitan Asylums Board contemplate using their empty, or nearly empty, small-pox asylums for the reception of patients suffering from the disease.

MR. H. C. BURDETT, late secretary and superintendent of the Queen's Hospital, Birmingham, has been elected secretary to the Seamen's Hospital. There were 134 candidates for the appointment.

THE subject of the Fothergillian Gold Medal for 1875 is "The Diseases of the Testicle and Spermatic Cord." For 1876, "On Cataract and its Treatment." Essays must be sent in before the 1st of the previous November.

DR. VANS BEST has been appointed for a second year to lecture to and conduct the midwifery class in the University of Aberdeen, during the absence of Professor Inglis.

THE ancient town of Damascus is now suffering terribly from fever. In all 14,000 persons, including the garrison, have been attacked.

INSANITY IN SCOTLAND.

THE Sixteenth Annual Report of the General Board of Commissioners in Lunacy for Scotland contains, like its predecessors, much valuable information on the condition and management of lunatics and lunatic asylums. Of the insane persons in Scotland, of whom the Commissioners have official cognisance, 1423 are maintained from private sources, 6505 by parochial rates, and 54 at the expense of the State. No certain knowledge can be obtained of the unreported insane maintained by their friends in private dwellings, but their number has been formerly estimated at about 2000. They are probably less numerous now, owing to the increasing tendency to seek parochial relief. The results shown by statistical tables in the report indicate a progressive increase in the number of lunatics brought under the cognisance of the Board; but it is left open to doubt whether such increase be due to a greater prevalence of insanity, or simply to a growing disposition to concentrate lunatics in asylums. In contrasting the lunacy of an active, busy, and increasing population, with that of a community which is less active, standing still, or even decreasing, it is pointed out in the Report that active and acquired insanity is doubtless more prevalent among the former, and idiocy or imbecility among the latter. Besides, the great centres of business attract the more energetic and

pushing members, who, by transferring their domiciles, at once increase the ratio of lunacy among those they leave behind, and decrease it among those they join.

That insanity is the result of bodily disease or imperfect development cannot, in the Commissioners' opinion, be called in question; but whether the varying causes which produce the requisite abnormal physical condition are most prevalent among the upper or lower classes of society is a problem which still awaits solution. Not improbably the overcrowding of the houses of the poor, their poor diet, and over-indulgence in intoxicating liquors, may have more than a counterpoise in the luxurious living of the rich, and in the greater amount of continual excitement to which want of occupation in some, and over-much occupation in others, give rise. But be this as it may, the Commissioners adhere strongly to the belief that not only is insanity a preventable malady, but that it is in the direction of preventing its occurrence that any sensible diminution can be effected in its amount. As to the nature and object of moral training, the Commissioners quote the observations made on this subject by Mr. William Jolly, Her Majesty's Inspector of Schools in the Northern Counties of Scotland. He remarks that one of the most important points in the education of children is quite overlooked in our schools—the education of the moral faculties. With the religious knowledge taught in our schools, moral teaching and training should also be systematically given. This subject treats of our duties to ourselves and others, their nature, and the principles that regulate their performance. A very large part of error in conduct arises from simple ignorance of the right actions to be done in certain circumstances, and their results to ourselves and others. In urging the teaching of moral duty in schools the subject is to be earnestly and eminently practical, and is to be as practically taught as writing or arithmetic. It should seek to show the child that the true purpose of life lies in the right development of his nature, in the formation of a high, truthful, broad, loving, manly character. The subject is treated in detail by Mr. William Jolly in a clear and practical spirit; and we concur with the Commissioners in thinking that if effect were given to these views, combined with due regard to physical training, far more successful results would be achieved in the diminution of insanity than have hitherto been attained through the operation of asylum treatment.

The Reports of the Deputy Commissioners on the condition of patients in private dwellings, printed in an appendix, serve to illustrate the system pursued in Scotland with reference to this class of patients. The Commissioners, while they are far from maintaining that their condition is in every respect satisfactory, still believe it to be more satisfactory in Scotland than in any other country. Adverting to the difference of opinion that exists as to the limit in size which asylums should not surpass, the Commissioners carefully balance the merits and demerits of large and small asylums, with the result of adhering to their formerly expressed opinion in preference of small establishments. The Commissioners throw out a suggestion for an interesting inquiry as to whether in different districts different forms of insanity are more or less prevalent; in other words, whether the patients received into asylums manifest certain prevailing types of insanity, originating in, or modified by the soil or climate of, the district from which they are drawn, or that the form of the malady is influenced by the occupations, dietary, and religious observances of the population. We have touched on a few, and but a few, of the materials for reflection contained in this Report.

DR. BARNES'S OBSTETRIC BAG.

MR. MILLIKIN, surgical instrument maker, St. Thomas's-street, Borough, has submitted to our inspection a portable bag of obstetrical instruments which have been chiefly suggested or designed by Dr. Robert Barnes. The instruments are exceedingly handsome, and creditable in every way to the maker. The contents of the bag are as follows:—

Dr. Barnes's long forceps, craniotomy ditto, perforator, crotchet, and dilators; Dr. Braxton Hicks's blunt hook; frænum scissors; female and other catheters; quill for puncturing membrane; chloroform inhaler; uterine syringe and enema; chloroform bottle; six stoppered bottles for sp. ammon. co., ether, tinct. opii, &c. &c.

Correspondence.

"Audi alteram partem."

PRACTICAL PHYSIOLOGY AT EDINBURGH UNIVERSITY.

To the Editor of THE LANCET.

SIR,—In one of the leading articles in last Saturday's number of THE LANCET you refer to the part taken by Dr. Rutherford in instituting the class of Practical Physiology in Edinburgh Univerasity. That gentleman himself says, in his letter to the curators, that in addition to the course of Histology previously taught by myself, he "organised two new courses, consisting of Experimental Physiology and Practical Physiological Chemistry." You will oblige by allowing me to correct the errors contained in these statements.

Histology, systematic and practical, was first taught by me in 1841, and the following year Quekett gave courses on the same subject in London. Shortly after my appointment to the Chair of Physiology in 1848 I saw the necessity of extending the practical department. But it was not till the year 1859 that I with great difficulty succeeded in obtaining a grant of money for the purchase of instruments necessary for that purpose. This was followed by another grant, with which I was enabled to convert the premises previously occupied by the Theological Library, into a new theatre, a chemical and physiological laboratory, and an instrument room. These were completed in 1862. By the kindness of Prof. du Bois Reymond of Berlin, Prof. von Bezold, of Jena, visited Edinburgh and personally instructed me in the use of the many delicate instruments which had now arrived, and with which I performed numerous experiments in my systematic class. The next step was obtaining an annual salary for an assistant. This was granted in 1863, and Dr. Argyll Robertson was nominated

to that office. This gentleman was the first to teach the three branches of the subject fully, under my direction—viz., Practical Histology, Practical Physiological Chemistry, and Practical Experimental Physiology. During the winter session 1864-5 the class numbered 75 students.

From this statement you may judge of my surprise on learning that Dr. Rutherford supposed that it was reserved for him, in 1865, to organise, or, as you put it, to "institute," two new courses of Experimental Physiology and Practical Physiological Chemistry in this University. Professor Foster, of Cambridge, says: "When I remember (!) what in former years you have done for physiology at Edinburgh, in organising the practical instruction in that science," &c.; and Dr. Sharpey more cautiously: "I believe I am right in speaking of him as having had a principal share in organising the course of Practical Physiology in the University of Edinburgh," &c.

Dr. Robertson informs me that immediately before his appointment Dr. Rutherford attended his class, and was instructed by him in the use of all the instruments, very much, as I believe, Dr. M'Kendrick in turn learned from Dr. Rutherford. No doubt the latter gentleman improved upon the teaching of practical physiology as originally given by Dr. Robertson, in the same manner as Dr. M'Kendrick greatly improved upon and extended what was taught by Dr. Rutherford. This was a matter of time and experience, and I left details to my assistants. But all this does not entitle any one of the three to claim for himself the merit of organising or instituting practical physiology in Edinburgh, or of adding two new courses to what previously existed.

I am, Sir, your obedient servant,

J. HUGHES BENNETT.

Glenfinlas-street, Edinburgh, Oct. 6th, 1874.

ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—At the introductory lectures of the Middlesex, St. Mary's, and University College Hospitals a note of warning to students contemplating a career in the Army Medical Department has been sounded. Candidates are exhorted to examine well the condition of the department and the validity of the complaints of the existing incumbents, with which the military and medical papers teem, before casting in their lots into such a sea of discontent.

Now, insignificant as the medical department may appear in comparison with the military body as a whole, still it is high time that the country should be informed unequivocally whether the medical officers of the army are banding themselves together to circulate fictitious grievances through the public press, and to misrepresent their condition to those who have the guidance of future students for the purpose of establishing, through a system of trades unionism, a medical strike, thereby compelling the Government to pay an additional price for an article which in a normal state of the market could be purchased for even less than was hitherto paid; or whether the legislators within whose province this department comes have acted so as to justify the murmurings of its members.

In the first place, no measures put in force to crush such organised insubordination can be too severe. In the second, inquiry ought not to be withheld. In either case great injury must be done to the public service since the better class of students are being deterred from competing for its appointments. And this was strikingly exemplified at the examinations in August last, at which, while 14 surgeons were admitted into the Indian service and 17 into the Army Medical Department, only the first four of the successful army candidates could exceed the marks of the *last* man of the Indian batch.

The irresponsible young candidate is, however, the father of the future surgeon-major, and even if the supervision of seniors supplements any deficiency during his subordinate service, the day must come when the wellbeing of many must depend upon his education and capability; and when, far away in unnatural and unhealthy climates, military officers, whose means would have enabled them, if in England, to obtain the best advice that money could procure, must submit themselves and all who are most dear to them to his unaided medical care. Then will they recognise the priceless value of professional ability, and, if left to mourn the loss of a beloved wife or child, under circumstances which leave a haunting suspicion that the case was not beyond the range of human skill, will derive little consolation from the reflection that public parsimony, supported by military jealousy, failed to offer terms which would attract a higher class of army medical candidates.

Ere it be too late a truce should be proclaimed and, pending a speedy and honourable investigation, the washing of dirty linen in public be postponed, lest a stamp of degradation be for ever affixed to a department which ought to be a source of pride to its component members, and an ornament to the profession of which it is a section.

Yours obediently,

October 6th, 1874. A MEDICAL OFFICER.

THE STATISTICS OF OVARIOTOMY.

To the Editor of THE LANCET.

SIR,—I go further than you do in your remarks on Dr. Heywood Smith's letter in your last number. I hold that, once published, cases become common property; that anyone is at liberty to use them in the way he thinks best, provided he names the observer, the place of record, and notices correctly whatever alterations may have been made in the re-issue of the case.

I am, Sir, yours &c.,

October 7th, 1874. E. J. TILT.

THE IRISH COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I have read with pleasure your very fair remarks upon the examinations at the Royal College of Surgeons in Ireland. That some reforms were necessary there can be no doubt, and those reforms had been determined on long before the visitation. But, Sir, I think sufficient stress has never been laid upon the fact that this body is the very first of all the surgical corporations to carry out clinical examinations at the hospitals and operations on the dead subject. I have myself seen the candidates operate, and confess I saw no objection whatever to the method adopted, which appeared to me a sufficient test. The strictures upon the clinical examination may be just, but by comparison only can we arrive at the truth, and any person who has seen or heard described the plan adopted at Lincoln's-inn-fields must let the balance fall in favour of the Irish college. At the M.R.C.S. examinations the operations are done on the *living* subject, the gashes, however, being made with a piece of coloured chalk, and I understand the patients for the "clinical" examination are brought from the hospitals to the college, a method which certainly must greatly limit the area of examination. All who take the least interest in these matters are well aware that at none of the surgical corporations are the examinations as searching and complete as they should be, but I think the impartial observer will admit that the Irish College has been the first to introduce practical tests into its ordinary examinations.

I am, Sir, your obedient servant,

Oct. 7th, 1874. AN OBSERVER FROM A DISTANCE.

SKETCHES OF CONTINENTAL HOSPITALS.

(*By our Special Correspondent.*)

IV.—DRESDEN.

DRESDEN, the capital of Saxony, though possessing many admirable public institutions, and a collection of pictures probably second to none on this side the Alps, is not a university city, and has no medical school. Its hospital, however, is well worth a visit, not only from the interesting historical associations connected with it, but also because the new wards are constructed on the barrack system, which seems to be now the favourite method of hospital construction in Germany. As the system is well carried out here, I shall give a description of it, and

the description will also be available for the Leipsic Hospital, and for the Augusta and New Town Hospitals of Berlin. Napoleon I. lived here, his sitting-room being now used as the operating-theatre, from June 10th to July 25th, and from Aug. 4th to the 15th, 1813—that is to say, just before the fatal battle of Leipsic,—and in this old palace the secret negotiations were carried on by which the Allies induced the entire Saxon army to desert Napoleon on the field of battle, and to join their forces to those of Austria, Russia, and Prussia, and so complete his downfall.

Most of the rooms in this old building are small, and contain from six to eight beds. It is chiefly used for medical cases, and, when the new building now in course of erection at the other end of the extensive garden of the hospital is completed, it will be exclusively medical. 600 patients may then be accommodated; the number of beds at present is about 360. The medical cases are in charge of Dr. Fieldler, and the surgical of Dr. Leonhardi, each of whom has two qualified assistants. There is also a special female syphilitic service under Dr. Martini. There are no out-patients, and those in the hospital pay from 1*s.* 3*d.* to 1*s.* 6*d.* a day.

The new surgical barracks were commenced two years ago. There are six pavilions of one storey each, capable of accommodating thirty-two persons, and arranged somewhat in the form of the letter H in the midst of a spacious garden. The long axis is from north to south, so that the chambers are exposed to both the morning and evening sun. The foundation of each pavilion is of sandstone, the roof of tiles, and the first floor is built of wood, and contains the ward in which from twenty-eight to thirty-two sick persons can be received. In the four angles of the ward, but separated from it by wooden partitions, are four small rooms, one for the nurse and another used as a kitchen, and provided with a concrete floor, while at the other end of the *salle* are the bath-room, lavatory, and closet on one side, and a small ward capable of holding two beds, and reserved for special cases. The heating is effected by two stoves placed on the middle line. The stoves, which are closed iron chambers covered with white porcelain, are on Kelling's system; the warm air enters by gratings five or six feet from the ground, and may be mixed with vapour from a chamber containing water placed within. The consumption of coal on the coldest day in winter did not exceed seventy-one to seventy-two hectolitres, and this was sufficient to keep up a uniform temperature of 16° to 17° Réaumar.

In the basement are, the apparatus by which the hot water is prepared and where the stoves are fed, a room for servants, a wardrobe for the patients' clothes, a washing-room, two wood- and coal-cellars, and lastly, in the centre, a free airy space, which is useful for ventilation and other purposes.

Cold air is admitted into the ward by small apertures round the walls, and there are also two ventilators in the roof, by which the heated air may get out. After examination of the air by Dr. Niedner, it was found that, at a temperature of 17° R., there was only one part of carbonic acid in 1230 parts of air; also that when the double windows were closed, and when there were thirty-one patients and one nurse present, each pavilion contained 1515 cubic metres of space, or 47·35 for each person.

The water service is not at present constant, but will be when the new supply of the city is obtained. Süvern's method of drainage and disinfection, which I have already described as in use at the Leipsic Hospital, is also applied here. Each pavilion costs, including gas, water, baths, heating, ventilation, and laying out of garden, but exclusive of drainage and disinfection, about £2000, or about £65 per bed. The pavilion system is probably the cheapest, as well as the simplest, way of building hospitals.

Pyæmia and erysipelas, which were common in the old hospital, are not seen in the new wards. Fenestrated charpie is applied as a dressing instead of lint or the ordinary charpie. Lister's treatment of wounds is carried out effectually by Dr. Leonhardi, and with excellent results. Starch or plaster of Paris is used for the treatment of fractures, combined in some cases with extension, and in fractures of the femur with the double incline. Delirium tremens, a not uncommon disease here, is treated on the stimulant plan, brandy being given throughout, and hydrate of chloral in large doses, as 30 grains, repeated after a few hours, if necessary. Cases of phthisis are made to live from May to October in a tent in the centre of the garden, open to sun and air all day, and only closed by curtains at night. The results are said to be encouraging. Syphilis is common, and the cases often very severe, chancres of a phagedænic kind being frequently admitted. Perchloride of iron is applied, and then cotton wool which has first been boiled with soda to free it from fatty matter and then dipped in a solution of carbolic acid, 1 part to 100. Treatment by mercury. The nursing of the hospital is done from a secular institution called the Albert Verein. The number of nurses seems rather small, and the work not over well done.

BIRMINGHAM.

(From our own Correspondent.)

THE public health of this town is showing some signs of improvement. The death-rate for the week before last was at the rate of 26·3 per 1000, for last week it fell to 22·7; and that the improvement is well marked is shown by the fact that during the past twelve weeks of the quarter the death-rate has averaged 28·3 per 1000. Of the 157 deaths 43 resulted from the seven principal zymotic diseases, against 79 and 66 in the two preceding weeks. There were only 66 new cases of small-pox reported, a smaller number than in any week since the beginning of July. The small-pox infirmary, which has now been transferred by the guardians to the custody of the Town Council, now contains only 72 patients, so that there are now 50 or 60 vacant beds. There were 11 deaths from that disease and 21 from scarlatina, as against 14 and 27 in the previous week.

The Mayor is about to hold a conference of the clergy, medical men, and others interested in sanitary questions, to consider the best way of grappling with the sanitary defects of the town. Many of those defects were pointed out by Dr. Alfred Hill, the health officer of the corporation, in the introductory address at Queen's College on the 1st inst. In fact, his lecture was mainly a *résumé* of the principles of hygiene and of their application to the prevention of disease. The importance of the dissemination of sanitary laws was pointed out, and also the benefit likely to accrue to the town by the establishment of a class presided over by Dr. Corfield for teaching the people the "laws of health." The indispensability of pure air, good water, and wholesome dwellings was insisted on; and, lastly, Dr. Hill advocated the disposal of the dead by cremation, and pointed out the evils attendant on the present system of earth burials.

Dr. B. W. Richardson, F.R.S., recently gave a very interesting lecture in the Town Hall on the Effects of Alcohol on the Human Economy. Though perfectly free from teetotal claptrap, the lecture was one of the best and most powerful aids the cause of temperance could possibly have received.

The winter session at Queen's College has begun, and a fair entry of students has already taken place. The following changes are noticeable in the professorial staff:—Dr. Foster takes the entire chair of Medicine, in consequence of the resignation of Dr. Russell; Mr. Thomas that of Anatomy, on the resignation of Mr. Bracey; and Mr. Wilders is appointed the colleague of Dr. Hill in the chair of Forensic Medicine, in the place of the late Mr. Swain.

Professor Humphry, of Cambridge, has undertaken to deliver the inaugural address at the opening of the session of the Midland Medical Society, and on that occasion the fellows will invite the profession of the town and district to a conversazione.

Birmingham, October, 1874.

PARIS.

(From our own Correspondent.)

THE PARIS TOWN COUNCIL AND THE QUESTION OF CREMATION.

IN one of my recent letters I mentioned that the Municipal Council of Paris, in connexion with the debate on the Paris cemeteries, had decided to take into consideration and investigate seriously the question of cremation. At their

meeting of August 13th the councillors settled that a *concours* or public competition would be opened, and would last six months, for the purpose of determining the best mode of incinerating the dead. At the same sitting it was also resolved that the Government would be asked to give its immediate attention to the practical solution of the question.

The examination of the subject has, therefore, been seriously taken up at the Prefecture of the Seine, where a special committee has been appointed for receiving and classing all the memoirs which may be sent in. Already upwards of six hundred pamphlets, notes, or suggestions for the best mode of cremation have been received. At the end of the six months specified, a report will be drawn up by the committee and sent to the Municipal Council, which will then be called upon to give its final decision.

STATISTICS OF SUICIDE IN FRANCE.

It has often been remarked that suicide in France has increased fearfully within the last forty years. The recent suicide of various important political personages has given renewed interest to the subject, and one of the Paris journals, in connexion therewith, has published some statistical documents and remarks which are worthy of notice. The first series of figures, which are official and authentic, include the yearly number of suicides from 1826 to 1860. They run thus:—1826, 1739; 1831, 2084; 1836, 2340; 1839, 2747; 1841, 2814; 1845, 3085; 1847, 3647; 1852, 3674; 1860, 3920. The figures go on increasing, and in 1869 the number of suicides attains 5114. That for 1872 is 5275.

Very many causes have been alleged to explain this fearful increase of the tendency to self-destruction; thus, the abuse of alcohol and tobacco, the struggle for life and quickened activity of mankind, &c. The *Paris Journal* lays great stress, as far as concerns France at least, on the influence of political troubles and turmoil, entailing general anxiety and misery, failure in business, &c. Thus, in the space of only two years, the troubled ones of 1845 to 1847, there was a sudden increase of 562 in the yearly number of cases. During the more flourishing time of the Empire, gradual yearly increase was arrested. In 1869, with the return of political agitation, the number again rose; and this year, after the troubled times the country has had, it is calculated that the total number will reach at least 7000. For the city of Paris alone there were 93 more suicides in 1873 than in 1872—to wit, 567 against 660; whilst this year, should the same daily proportion of suicides continue, it will reach about 1000.

THE LECTURES AT THE INSECTOLOGICAL CONGRESS.

In your last number there was a notice of the very interesting exhibition of insects which has been opened and is now to be visited in the garden of the Tuileries. In connexion with the exhibition, an Insectological Congress has been formed, which, amongst other measures, has instituted courses of lectures to be delivered during the time of the Exhibition. The first lecture was delivered by Dr. Gelot on the cultivation, training, and pathology of the silkworm in America. M. Tellier followed with a lecture on the Application of Cold in Insectology. On September 26th Dr. Girard lectured on the Preservation of Industrial Insects. Various foreign delegates from Sweden, Belgium, Austria, &c., form part of the Congress, and are amongst the lecturers.

BUDGET OF THE SEWERS OF PARIS.

The complicated and immense sewer-works of Paris, one of the curiosities of this capital, constitute a most important department of the city administration. In the Budget of the city for 1875, which has just been published, the keeping in repair of the sewers figures for 2,500,000 francs. This is for simply keeping up the various parts of the present sewer-system, the impoverished state of the city finances not allowing the authorities to complete and terminate the works in some of the suburbs. On the other hand, it is calculated that the sewer department brings in about £5000 to the town, the main source of income being the utilisation and sale of the sewer matter.

PROFESSOR SCHIFF ON CHLORAL AND CHLOROFORM.

Professor Schiff has recently been conducting a series of experiments in his laboratory at Florence, for the purpose of determining the anæsthetic properties of chloral. Amongst other particulars, the Professor has stated in a decisive manner that anæsthesia with chloroform produces dilatation of the pupils, whilst constriction is a result of anæsthesia with chloral. He therefore advances this fact against the opinion which ascribes the anæsthetic action of chloral to its transformation into chloroform.

ITALIAN PRIZES FOR MEDICAL ESSAYS.

The Institute of Lombardy has made known the subjects of its prizes for 1875 and 1876. For 1875 the subject is "On Transfusion of Blood in Man," and the prize is £60, with a gold medal worth £20. For 1876 the subject is "On Electrotherapy applied to the Resorption of Tumours"; the prize is the same as above.

The extraordinary prizes of the Cagnola foundation are also announced. The medical subject for 1875 is "On the Nature of Miasms and Contagion"; the prize is worth £60, with a gold medal worth £20.

The questions for the Secco-Comneno foundation are as follows: 1875—Show whether rays of light of various colours can exert an action on the vegetation of plants and on the nutrition of animals; 1876—Determine what are the best antifermentative and antiseptic means, the best substances for disinfecting and deodorising, &c; 1877—Indicate a method of cremation which may be substituted for burial. Each prize is worth about £35.

The extreme limit of time for sending in the essays is the last day of February of each year.

Besides the above prizes, there are those of the Castiglioni and Fossati foundations, the subject of the former for the year 1875 being: "Is it better to choose animal or human vaccine in the prophylaxis of small-pox" (prize £24); and of the latter—"Relate the progress of anatomy and physiology of the brain in the present century, especially as regards Gall's doctrine" (prize £80).

The Italian journals record the premature death of Dr. Antonio Correnti, a most distinguished worker in the profession, who, though only aged thirty-two, had already gained considerable reputation as an ophthalmological surgeon, and was attached to the chair of Anatomy in the Royal Institute of Florence.

A marriage, which unites two eminent names in the profession, will shortly be celebrated in Paris; the son of Baron Thénard, member of the Institute, and grandson of the illustrious chemist, is to marry Mademoiselle Odette de Mussy, the daughter of Dr. Henri-Guéneau de Mussy, the eminent physician to the Orleans princes, who reckons so many friends amongst the profession in London. The Duc d'Aumale and the Comte de Paris will act as friends of the young bride, and accompany her to the altar.

Paris, Oct. 6th, 1874.

Obituary.

MR. JOSEPH SWAN, F.R.S.

THE Senior Fellow of the Royal College of Surgeons of England, Mr. Joseph Swan, F.R.S., died at Filey on the 4th inst., at the good old age of 83. Mr. Swan became a member of the College in 1813, and for some years held the post of surgeon to the Lincoln Hospital. Early in life he devoted much attention to the anatomy of the nervous system, so that he was the successful competitor for the College Triennial Prize on the first two occasions of its presentation—namely, in 1822 and 1825. The subject of the first essay was "A minute Dissection of the Nerves of the Medulla Spinalis from their origin to their terminations, and to their conjunctions with the Cerebral and Visceral Nerves; authenticated by preparations of the dissected parts"; and of the second—"A minute Dissection of the Cerebral Nerves from their origin to their termination, and to their conjunction with the Nerves of the Medulla Spinalis and Viscera; authenticated by preparations of the dissected parts." The results of Mr. Swan's labours were given to the world in his well-known "Demonstrations of the Nerves of the Human Body, in 25 plates," published in 1830 in folio, and in 1834 in quarto; and in his "Illustrations of the Comparative Anatomy of the Nervous System," published in 1835. But Mr. Swan had also paid attention to the surgery of the nervous system, and particularly of the ear, and in 1819 he was awarded the Jacksonian Prize for an essay on "Deafness and the Diseases and Injuries of the Organ of Hearing," and gained the same prize again in 1819 for an essay on "The

Treatment of Morbid Local Affections of the Nerves." This last essay was published in 1820, and was expanded into a "Treatise on Diseases and Injuries of the Nerves," published in 1834. Mr. Swan's activity in the investigation of the anatomy of the nervous system did not cease with advancing years, for in 1853 he brought out a series of plates of the brain, and so lately as 1864 he published a quarto volume of "Delineations of the Brain in relation to Voluntary Motion," consisting of beautiful lithographs drawn from his own dissections. Mr. Swan became a member of the Council of the College of Surgeons in 1831, and, having been so distinguished an anatomist (to say nothing of being four times "crowned" by the College itself), it might have been expected that he would have been chosen an examiner. But Mr. Swan had never been surgeon to one of the great hospitals, and those were the days of close boroughs when the old surgeons who formed the Court ruled the entire Council with a rod of iron, and promoted none but members of their own clique. Accordingly Swan was passed over for the examinership, and never even attained the honour of being Hunterian Orator or Professor of Anatomy and Surgery to the College, for which last post his studies specially fitted him. Mr. Swan remained a member of the Council of the College until 1869, but never took any active part in its proceedings. He never enjoyed a large practice, but was much loved and esteemed by those who knew him well.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Oct. 1st:—

Bullen, Beresford Henry, Upper Kennington-lane.
East, George Edward, Hounslow.
Greenwood, John William, Preston, Lancashire.
Jones, William Makeig, Blaenavon, Monmouthshire.
Morgan, George, Pontypool, Monmouthshire.

THE last health returns from Dublin show a considerable decrease of deaths from scarlatina.

AT the annual meeting of the Northumberland and Durham Medical Society, recently held at Newcastle-on-Tyne, Mr. Broadbent, of South Hetty, was elected President.

DR. J. W. MORISON and Dr. J. F. Stamper have been placed on the Commission of the Peace for the Borough of Pembroke; and Mr. John Dale, M.R.C.S. Eng., for Stockton.

THE introductory address delivered this year at University College Hospital by Dr. Frederick T. Roberts has been published as a pamphlet by Mr. Lewis, of Gower-street. It is well worthy of perusal.

INSPECTION OF MILK.—The committee of the Metropolitan Dairymen's Society has issued a circular, calling attention to the inadequate results of the inspection of milk under the provisions of the Adulteration Act, and suggesting a general application of those provisions in the districts where the statute is at present a dead letter.

OWENS COLLEGE MEDICAL SCHOOL, MANCHESTER. —As most of our readers are aware, this institution was opened last week with a most able inaugural address by Professor Huxley. The business of the day comprised the distribution of prizes and scholarships to the successful students. The list, which was read by Professor Southam, was as follows:—Third year's scholarship, value £20, F. H. Grosholz, Bowdon; first prize, value £5 5s., T. Anningson, Burnley; second prize, value £3 3s., A. Chadwick, Heywood; third prize, value £2 2s., T. Gallimore, Rusholme. Second year's scholarship, value £15, H. Tomkins, West Gorton; first prize, value £5 5s., J. Chadwick, Milnrow; second prize, value £4 4s., S. Harris, Manchester; third prize, value £3 3s., G. L. Lennon, Manchester. First year's scholarship, value £10, A. T. Wilkinson, Driffield; first prize, value £5 5s., J. Ferguson, Manchester; second prize, value £4 4s., T. C. Booth, Manchester; third prize, value £3 3s., C. C. Diggle, Bury. Dumville Prize in Surgery, value £20, F. E. Smith, Preston. Special Prize in Practical Physiology and Histology, value £10 10s., F. A. Southam, Manchester.

BEQUESTS &C. TO MEDICAL CHARITIES. — Mr. R. Newsbham, Chairman of the Preston Local Committee, has sent 300 guineas additional to the Royal Albert Asylum for Idiots, Lancaster. The Rev. Charles Awdry, of Worthen, Salop, has bequeathed £100 to the Salop Infirmary. Mr. Thomas Twining has given £100 to the Richmond (Surrey) Infirmary. The Paisley Infirmary has become entitled to £100 under the will of Mr. Thomas Speir.

A NEW SIGN OF PLEURITIC EFFUSION.—According to Dr. Ward, of New York (*New York Med. Journal*), it is easy to determine fluctuation of liquid in pleuritic effusions as well as in ascites and in ovarian cysts. When the chest is full of water, by having an assistant to use percussion in the second or third intercostal space, and by placing one's finger in the seventh intercostal space, where thoracocentesis is practised, the feeling of fluctuation, according to Dr. Ward, is distinctly given.

FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW. At a meeting of this corporation, held on the 5th inst., the following office-bearers were elected for the ensuing year, viz.:—President, Dr. Andrew Fergus; Visitor, Dr. James Morton; Treasurer, Dr. John Coats; Honorary Librarian, Dr. J. D. Macfaren; Vaccinator, Dr. Hugh Thomson. Board of Examiners: Dr. James Morton, Surgery and Surgical Anatomy; Dr. Robert Perry, Chemistry; Dr. P. A. Simpson, Midwifery and Medical Jurisprudence; Dr. McCall Anderson, Medicine and Materia Medica; Dr. Alexander Lindsay, Chemistry; Dr. George Buchanan, Anatomy and Physiology; Dr. R. Scott Orr, Medicine and Materia Medica; Dr. J. G. Wilson, Midwifery and Medical Jurisprudence; Dr. Donald Dewar, Surgery and Surgical Anatomy; Dr. Eben. Watson, Anatomy and Physiology.

Medical Appointments.

ADDERLEY, J., M.D., has been appointed Resident Medical Officer and Apothecary to the Cork Fever Hospital, vice Atkins, appointed to the Fever Hospital, Cork-street, Dublin.

ANDERSON, J. W., M.D., has been appointed Assistant-Physician to the Royal Infirmary Dispensary, Glasgow, vice Dr. D. Campbell Black, resigned.

ANDREW, J. L., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of Health for the Mossley Urban Sanitary District: £20 per annum. And for the Staley Urban Sanitary District: £10 per annum.

ATKINS, G. P., L.R.C.P.Ed., L.R.C.S.E., has been appointed Resident Medical Officer to the Fever Hospital, Cork-street, Dublin.

BEATSON, G. T., M.B., C.M., L.R.C.S.Ed., has been appointed Senior House-Surgeon to the Newcastle-on-Tyne Infirmary, vice Page, resigned.

BELLIS, E., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer of Health for the District of Much-Woolton, near Liverpool.

BEVERIDGE, R., M.B., L.R.C.S.Ed., has been appointed an Examiner for Graduation in Medicine at the University of Aberdeen.

BROOK, T. G., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 1A District of the Langport Union, Somersetshire, vice Prankerd, resigned.

BOSSON, G., M.R.C.S.E., has been appointed Medical Officer to the Albion, 5678, Lodge of the Ancient Order of Foresters, Alford, vice Crowther, resigned.

BUTTER, G. B., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for No. 8 District of the Bedminster Union, and Medical Officer of Health for No. 8 Sub-district of the Bedminster Rural Sanitary District: £15 per annum; acreage 7524; population 3358;—all vice Concanon, resigned.

CALDWELL, S., L.R.C.S.I., L.K.Q.C.P.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Virginia Dispensary District of the Oldcastle Union, Co. Meath, vice Atkin, resigned.

CAMERON, J., M.B., C.M., has been appointed Medical Superintendent to the Argyll and Bute District Lunatic Asylum, Lochgilphead, vice Jas. Rutherford, M.D., appointed to the new Asylum for the Barony District of Glasgow now in course of erection at Lenzie Junction.

CLARKE, F. W., M.R.C.S.E., has been appointed Medical Officer to the Bury St. Edmund's Workhouse, vice Dalton, resigned.

DEAN, T., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Brierfield, Burnley, Nelson, and Trawden Urban, and Burnley Rural, Sanitary Districts: £500 per annum for three years; acreage 62,606; population 79,534.

FOULKES, J. A. L., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer for the Patterdale District of the West Ward Union, Westmoreland, vice Martindale, deceased.

FOSTER, W. F., M.R.C.S.E., has been appointed a Medical Officer to the Newport and Ventnor Branch of the Hampshire Friendly Society.

FOX, E. D., M.R.C.S.E., has been appointed Surgeon to the A and B Divisions of the Manchester Police, and to the Fire Brigade, vice Fletcher, deceased.

FRASER, A. D., M.B., C.M., has been appointed Medical Officer for the Workhouse, and Medical Officer and Public Vaccinator for the Ponteland District of the Castle Ward Union, and Medical Officer of Health for the Ponteland Sub-district of the Castle Ward Rural Sanitary District, vice Bethune, resigned.

GAMGEE, A., M.D., F.R.C.P.Ed., has been appointed Assistant-Physician to the Manchester General Hospital and Dispensary for Sick Children, vice Gwyther, resigned.

GILL, H. C., M.R.C.S.E., has been appointed Medical Superintendent of the York Lunatic Asylum, Bootham, York, vice Needham, appointed to the Barnwood House Lunatic Asylum, Gloucester.

GREENSILL, E. S., M.R.C.S.E., has been appointed House-Surgeon to the Royal United Hospital, Bath, vice Roecket, M.R.C.S.E., whose appointment has expired.

HAMILTON, F. G., M.R.C.S.E., has been appointed a House-Surgeon to the Queen's Hospital, Birmingham.

HOURIGAN, Dr. W. P., has been appointed Medical Attendant to the Royal Irish Constabulary, Tullaroan, Co. Kilkenny, vice Hackett, resigned.

HUNTER, W., M.B., C.M., has been appointed Assistant Medical Officer to the Barnhill Asylum and Poorhouse, Glasgow, vice Hagart, resigned.

MACKENZIE, L., L.R.C.P.L., M.R.C.S.E., has been appointed Resident Medical Officer to the London Hospital, vice W. A. Kibbler, L.R.C.P.L., M.R.C.S.E., resigned.

MAGEE, R. J., L.R.C.S.Ed., has been appointed Medical Officer to the Workhouse and Fever Hospital of the Kilkenny Union, and a Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kilkenny Dispensary District, vice Potter, deceased.

MARKEY, T., M.R.C.S.E., has been appointed Medical Officer for No. 1 District of the Ongar Union, vice Willan, resigned.

MASON, W. I., L.R.C.P.Ed., M.R.C.S.E., has been appointed Surgeon to the East Union Railway Benevolent Institution, vice M. Mason, M.R.C.S.E., resigned.

MORRIS, G., M.R.C.S.E., has been appointed Medical Officer to attend Patients of St. Mary's Hospital and Dispensary for Women and Children, Manchester, at their homes, vice Smith, resigned.

MURPHY, J., M.B., C.M., has been appointed Junior House-Surgeon to the Sunderland and Bishopwearmouth Infirmary and Dispensary, vice White, resigned.

NORMAN, C., L.K.Q.C.P.I., L.R.C.S.I., has been appointed an Assistant Medical Officer to the East Dispensary, Liverpool.

O'FARRELL, N. S., M.B., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Woodstown Dispensary District of the Waterford Union, vice O'Leary, resigned.

OGSTON, A., M.D., has been appointed an Examiner for Graduation in Medicine at the University of Aberdeen.

RANSFORD, T. D., L.R.C.P.L., M.R.C.S.E. (late House-Surgeon, Guy's Hospital), has been appointed Assistant Medical Officer to the Workhouse and Infirmary, Toxteth-park, Liverpool, vice Carter, resigned.

SMITH-SHAND, J. W. F., M.D., L.R.C.S.Ed., has been appointed an Examiner for Graduation in Medicine at the University of Aberdeen.

WRAITH, J. H., M.R.C.S., L.S.A., has been appointed Medical Officer for the Darwen Rural Sanitary District of the Blackburn Union.

Births, Marriages, and Deaths.

BIRTHS.

BELLINGHAM.—On the 26th ult., at Dudley, the wife of J. Bellingham, M.R.C.S.E., of a son.

HAMILTON.—On the 4th inst., at Northampton-park, Canonbury, the wife of T. Hamilton, M.B., F.R.C.S.Ed., of a son.

HARRIS.—On the 8th inst., at Watkyn-terrace, Cold Harbour-lane, S.E., the wife of Henry Harris, M.R.C.S., of a son.

MIDDLEMIST.—On the 5th inst., at Bedford-place, Russell-square, the wife of R. P. Middlemist, M.R.C.S.E., L.R.C.P.L., of a daughter.

ROBSON.—On the 4th inst., at Rock-ferry, Cheshire, the wife of J. Robson, M.D., of a daughter.

MARRIAGES.

BAXTER—MASON.—On the 14th ult., at Havant, Evan Buchanan Baxter, M.D., to Sophie Caroline, widow of the Rev. H. B. Mason.

HERON—EVANS.—On the 17th ult., at the British Consulate, Frankfort-on-the-Maine, and afterwards at St. Augustine's Chapel, Wiesbaden, G. A. Heron, M.D., of King's Cliffe, Northamptonshire (eldest son of G. Heron, Esq., of Glasgow), to Harriet Maria, only surviving daughter of the late Charles Evans, M.R.C.S.E.—No Cards.

RAW—TAYLOR.—On the 12th of Aug., at St. Cyprian's Church, Durban, George Henry (fo rth son of James Raw, Esq., of Maritzburg), to Edith Sarah, youngest daughter of W. T. Taylor, M.R.C.S.E., of Durban.—No Cards.

DEATHS.

BERTIN.—On the 21st of Aug., at Lyon-sur-Mer, Etienne Bertin, M.D., M.R.C.S.E., formerly of Leicester-place, Leicester-square, aged 93.

BLACKSTONE.—On the 1st inst., J. Blackstone, M.R.C.S.E., of Gloucester-road, Regent's-park, aged 78.

FLETCHER.—On the 14th ult., J. O. Fletcher, M.D., of The Oaks, Greenheys, Manchester, aged 50.

HORTON.—On the 21st ult., C. Horton, M.D., of Bromsgrove, aged 61.

THOMPSON.—On the 21st ult., Robt. Thompson, M.R.C.S.E., of Theatre-street, Norwich, aged 63.

TROTTER.—On the 2nd inst., John Trotter, M.D., of Old Elvet, Durham, aged 78.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. Murchison: Functional Derangement of the Liver.
Dr. Barety: De l'Adénopathie.
Tanner's Practice of Medicine. Vols. I. and II.
Autobiography of Dr. Granville. Vols. I. and II.
West Riding Lunatic Asylum Reports.
Bain's Companion to the higher English Grammar.
Mr. R. L. Millington: Latin Exercises on Barbarisms for Junior Students.
Department of Agriculture—Victoria.
Microscopical Journal (October).
Westminster Review. Sunday at Home. Leisure Hour.

Notes, Short Comments, and Answers to Correspondents.

HEALTH OF NEW YORK.

THE coroner's report for 1873 gives 113 infants found dead in the streets and rivers; 26 deaths by suffocation, principally infants overlaid in bed; 685 deaths by accident; 15 cases of accidental shooting and poisoning; 3 deaths from heat; 151 from drowning; 101 from suicide; 58 from homicide; 3 from malpractice; and 2 from judicial hanging—in all 1155. The nationalities of the suicides were: Germany, 40; United States, 34; Ireland, 17; England, 12; France, 2; Switzerland, 2; Russia, 2; Italy, 1; and Poland, 1. Their ages were as follows: Under twenty, 6; under thirty, 26; under forty, 35; under fifty, 24; under sixty, 7; under seventy, 2; over eighty, 1. Paris green was the poison used in 23 cases; narcotics in 7; arsenic in 1; prussic acid and oxalic acids in 2. Of disease there died during the year 29,000 persons, a decrease of 3649 from the last twelvemonth. Consumption numbered 4148 victims; diarrhœa, 4105; pneumonia, 2306; bronchitis, 1038; diphtheria, 1130; scarlatina, 1039; and Bright's disease, 878. 40 people died aged 90; 33 at ages ranging from 99 to 95; and 5 had attained the age of 100. There were 22,587 births registered during the year, an excess of 520 over the number registered in 1872; while of marriages there were 8865, a falling off of 89 as compared with the previous twelvemonth.

Dr. Mitchinson (Lincoln) is thanked for his courteous information.

"VARIOLOUS INOCULATION IN JAMAICA."

To the Editor of THE LANCET.

SIR,—In your impression of July 25th last is a brief notice, headed as above, in which an attempt, I think, is made to cast ridicule upon certain members of the profession ("wiseacres"), because they troubled their Government with the claims of inoculation, and who are unjustly represented as preferring variolous inoculation to vaccination.

As one who for forty years past has advocated, and does still advocate, vaccination as the best and only safe protection against small-pox, but who unfortunately has lived to see sanitary measures, and amongst them so-called compulsory vaccination, shamefully neglected, and rendered useless and worse than useless through the carelessness and apathy of the authorities in a British colony, I do solemnly protest against so important a question as that involved, and one, too, which has engaged the attention of such writers as Copland, Sir Thos. Watson, Mr. Marson, and Trousseau, being so dealt with. The question, Sir, is, whether during an outbreak of small-pox on board a ship or in a colony where vaccine is not available, and where unprotected persons are, and where segregation cannot be efficiently enforced, variolous inoculation, under proper supervision and due restrictions, is justifiable? This, Sir, was the question put to the Government in the early part of 1873, and again brought to their attention by telegram in 1874. I am quite sure, when the whole truth is known as regards the existence and history of small-pox in this island during the last three years (Sept. 1871), no sensible man will condemn the so-called "wiseacres" for the part they acted in recommending that, in the failure of vaccination, the lesser of two evils (variolous inoculation) should be resorted to, under proper restrictions, to lessen human suffering and to prevent the sacrifice of human life. As one who has heard much of inoculation, as practised in this island a few years back, and who has personally witnessed the wonderful effects of it, I have no frantic dread of its results in this climate, especially if confined to an outbreak of small-pox, and performed with due care; and I am convinced that when from any cause vaccination cannot be effectually carried out, and natural small-pox is prevalent, variolous inoculation *ought* to be practised, and under such circumstances it would prove, as it did formerly, a great blessing to suffering humanity.

I am, Sir, your obedient servant,

Jamaica, September, 1874. L. J. BOWERBANK, M.D., F.R.C.P.

CANNES, A WINTER RESORT.

THAT this city affords an excellent abode for weak-chested patients in the cold season is no novelty; but a new feature is the establishment proposed by Dr. Mercier. This physician, whose plan is approved by all the medical men of Cannes and the authorities of the place, is to found a highly respectable and trusty kind of boarding house, where patients, whose friends or family cannot accompany them, may be received and enjoy all the advantages of a home. For the young, the unmarried of the female sex, and the aged, the house may prove of much advantage.

Enquirer should apply to a mineralogist.

THE SCHOOL OF SALERNO AND RICHARD CŒUR DE LION.

To the Editor of THE LANCET.

SIR,—Your last issue contains a good translation of the dedicatory stanzas of the Schola Salernitana, so good, indeed, as to make one wish for the rest of the præcepta metrica "Englished" by the same happy scholar. Meanwhile, surely the lines were addressed to Duke Robert of Normandy, son of William the Conqueror, not to Richard Cœur de Lion, at least if it be exact, and the most reliable evidence tends that way, that these clever leonines were written by John of Milan, the doctor-poet of the eleventh century. Then could they not have been intended for Richard, who did not reach the throne till eighty years later. The "Anglorum Regi" is used in a sense of poetical rather than of historical justice.

Your obedient servant,

Brook-street, Hanover-square, Sept. 29th, 1874. J. D. CHEPMELL.

*** Criticism has long ago refused to assign the hexameters in question to John of Milan; and the source from which we took them makes Richard Cœur de Lion the monarch ("Anglorum Regi") to whom they were addressed.—ED. L.

PSYCHOLOGY AT THE LYCEUM.

MR. HENRY IRVING continues to draw large and cultivated audiences to the Lyceum by his masterly impersonation of "Mathias" in *The Bells*. In some respects this his first triumph as a delineator of the intenser emotions remains his finest, though his "Eugene Aram" and his "Charles I." have merit enough to quicken the public desire to witness his "Hamlet." In the character of the moody, metaphysical Prince of Denmark, his powers will be taxed to the uttermost; but, we doubt not, he will prove equal to a part in which even Macready and Charles Kean, among recent actors, left room for criticism. In "Mathias" Mr. Irving has a rare subject for his sombre genius; and in the delineation of remorse, alternating with fear and fatherly affection, and the subtle play of voice, feature, and attitude by which he renders the murderer struggling to flee from the law, while he cannot escape from himself, he excites his audience to a pitch almost painful in its intensity. In the closing scene, where he unbosoms himself to the phantom mesmerist in presence of a phantom tribunal, he reaches the height of dramatic effect, taking criticism by storm, and stifling whatever realistic objection might be made to mesmerism as a forensic agent. His "Mathias," in short, is a psychological study, well worthy the attention of the student of human nature, whether professional or amateur.

A Constant Subscriber, (Dublin.)—The double qualification is required for such an appointment.

LOUISA ELIZA CHOLMELEY COLES.

To the Editor of THE LANCET.

SIR,—Obituary notices are generally accorded to eminent statesmen, renowned warriors, and to men of letters and science, including, therefore, those who have fallen in the ranks of our profession. But there are yet others who shine in less conspicuous spheres of action, and whose lives are sacrificed to noble causes, that are equally worthy of a tribute to their memory. Such a one, in the person of Miss Coles, has recently (Sept. 15th) passed from the scene of her beneficent labours, as lady superintendent of the British Nursing Association, and of the nursing department of the Royal Free Hospital, besides holding a similar official relation to some half-dozen other hospitals or infirmaries in London and the provinces.

Commencing at the age of fifteen her ministration of attendance on the sick as a district visitor, she afterwards turned her attention to medicine, with the view of entering the profession. She soon, however, discovered, not her own inaptitude for the acquirement of the requisite kind of knowledge, but the anomalous position of the female practitioner, in her social and moral relations, as a member of the profession; and she also perceived that the proper sphere of woman's work in that direction lay in a higher order of nursing than formerly prevailed. Miss Coles always regarded the moot question of female eligibility for the profession, not as a matter to be settled by argument, but by the intuitive sense of fitness or unfitness. You might as well ask, she used to remark, why women have not beards as attempt to assign the reason why they should not have been adapted by nature for the circumstances of professional life in the practice of medicine and surgery, however well educated for this purpose. Abandoning, therefore, her original intention, she discovered in the pursuit of nursing, as an art, an almost uncultivated field of labour, and where she might eventually train others to the ideal standard she had so happily conceived. Gifted by nature with an appearance, voice, and deportment expressive of calm dignity and tender sympathy, she possessed also a remarkable energy, beyond indeed her physical strength, coupled with a rare capability for her peculiar work; nor was she less distinguished for her simple piety and the sincerity of her character. This singular combination of qualities, with a cultivated experience, attracted the attention of the British Nursing Association, to which about five years since she was appointed lady superintendent, and shortly afterwards her services were extended in the same capacity to the nursing department of the Royal Free Hospital. It is the bare truth to acknowledge that under her supervision a far higher order of nurses was provided than in the whole previous history of the hospital, whereby that institution has been transformed and raised to a state of efficiency such as those only who remember what it was can adequately appreciate. Nor can it be doubted that the other institutions under her direction have shared the benefits of a similar management. It was, therefore, with anxious solicitude that those who best knew her worth watched the decline of her health beneath the strain of incessant overwork by day and night, oppressed also recently by mental harass of the most painful character. Utterly exhausted in mind and body, an attack of severe ophthalmia, affecting the right eye, was rapidly followed by orbital abscess; pneumonic consolidation of the right lung supervened, complicated with previous heart disease in the form of mitral regurgitation. The medical staff of the hospital attended their patient with the most assiduous care, and in their unavoidable absence Dr. Wilson Fox most kindly lent his valuable services, while Mr. Power gave Mr. Gant the benefit of his ophthalmic experience. The eye was saved; but the prostration and circumstances which had induced the attack proved overwhelming, and after an illness of four weeks' duration, borne with the patient Christian fortitude which had solaced many a death-bed, she herself sank to her rest at the early age of thirty-one years.

Yours truly,

September, 1874. ONE OF THE HOSPITAL STAFF.

Mr. I. B. Brown Sirs, (Nottingham.)—We fear that our correspondent has no redress; but he might make application to the Secretary for War on the subject.

ARSENIC IN WALL-PAPERS.

To the Editor of THE LANCET.

SIR,—Will any reader of THE LANCET who has had practical experience of the evil effects of arsenic and of its poisonous results in families state the facts and results known to them. It appears undoubted that patients suffer, and often very seriously, from arsenic poisoning in the wall-paper, which it is well known very commonly contains large portions of this drug. It is also well known that paperhangers are aware of the evil consequences upon themselves. Scientific, practical, and medical information is earnestly requested upon this important subject.

Yours, &c.,

September 21st, 1874. F.R.C.S.

OPIUM.

IT is well known that Turkey opium contains a higher percentage of morphia than Indian or Persian, and that consequently the greater portion of the opium used for medical purposes in Europe and America is the production of Asia Minor. In former years the crop in the district of Smyrna annually averaged from 2000 to 3000 baskets or cases at 150 lb. each. This quantity was consumed in England; America took a very small portion. The Dutch East India Company also for many years have purchased a considerable quantity annually to send to the islands of Java, Batavia, and Sumatra. Of late years the consumption has largely increased, especially for North and South America and the West Indies. The crop, according to Mr. Consul Reade, now averages from 4000 to 6000 baskets or cases. Of this quantity the United States require above 2000 cases. The price has risen lately, averaging £1 per pound. Fifteen years ago it averaged 15*s.* per pound. Owing to the late high prices, some persons at Smyrna have during the last two years adulterated the pure drug by mixing it with spurious matter, and passing it off as first quality. They succeeded in selling about 300 cases during the last two years; but, as the fraud has been discovered, the consequence has been that purchasers have been very careful from whom they obtain this drug. The crop for 1874, which is collected in May and June, has suffered considerably from the late severe frosts; consequently a short yield will also increase the value. In 1873 the stock existing in Smyrna was 1500 baskets; in London, 700; and in the United States, 600 baskets.

M.D. informs "A Constant Reader" that he will find a Cripples' Home for boys at High-street, Kensington.

LEPROSY.

To the Editor of THE LANCET.

SIR,—After reading the report of Dr. Dougall, which appears in your issue of the 13th June last, I was induced to publish in the *Royal Gazette* of this city (a copy of which I now send you by post) a short account of a case of leprosy now under my treatment. The girl was attacked with the disease about six years ago. All remedies used were worse than useless, and people thought the case incurable—in fact, such is the general opinion of the community in cases of this sort. I volunteered to make a trial, in order to convince the people that the disease can be arrested, and the condition of the leprous greatly improved, and that many who are now suffering with that disease might have their condition improved by giving my remedies a fair trial. Although the time (two months) is rather short to give an account of the case, yet I think it but just to mention that the ulcers of both feet, which were very bad and offensive, are all nearly cured, save one on the little toe, which was very deep; the hands, which were really bad (two fingers having already been destroyed, and I barely had a chance to prevent a few others from sharing the same fate), improving nicely. I entertain hopes that after six or seven months she will be able to appear in public any time during the day. The improvement in the condition of the ulcers and the girl's face has been witnessed by parties who knew her when bad, and the mother, when asked about the state of her daughter, says "she is getting better."

I shall be glad to render my services to anyone in this colony who is now labouring under the same disease, and by strictly adhering to my advice they will find their condition greatly improved.

Your obedient servant,

Demerara, British Guiana, Aug. 26th, 1874. F. H. G. DUMONT.

*** Dr. Dumont's case is another illustration of the now well-acknowledged fact in regard to leprosy, that by the institution of careful hygienic and medicinal measures the disease can be very decidedly ameliorated, though all evidence goes to show that no such thing as *a cure* for leprosy is at present known.—ED. L.

A. M.—1. It is doubtful.—2. We should not recommend the proceedings on the first-mentioned ground.—3. If he does not qualify the title by appending to it the name of the University, we think he does violate the Act. The fraud is intensified if he has no degree at all, and it should be exposed.—4. We are not aware of any instance of a Friendly Society being prosecuted on the ground specified.—5. The Clerk of the Branch Council for England is Mr. John C. Roope.—6. If a medical man were called in to see such a case, it would be his duty to report to the coroner the facts.—7. The Act could be bought for a few pence of Spottiswoode.

READY MONEY *versus* LEDGERS.

To the Editor of THE LANCET.

SIR,—I was very glad to see the letter of "Medicus," on the "Payment of Doctors," in a recent issue of your journal. My experience for many years has been similar to that which he describes, and most disheartening it was, quarter after quarter, to see the increasing piles of "bills delivered." Rather more than twelve months ago I determined to act on the ready-money principle with all strangers or in doubtful cases, and with the happiest results. I receive an encouraging amount of fees, and have far less trouble with my ledger, which used to be the only book I didn't like to open. I live in a suburb of a large city, where the population for the most part is migratory, and I found if I didn't get my fee at once I never got it at all. The honest people pay directly I state my charge, before I prescribe or make a visit; but it is amusing to hear many would-be patients say, "Oh, then, I will go to So-and-so," or, "I thought doctors were bound to come," &c. &c. If general practitioners would insist more upon payment before prescribing or visiting, I feel convinced they would benefit not only themselves, but the profession at large, besides giving a wholesome lesson to a numerous class of individuals, who seem to look upon the doctor as a sort of servant, ready to attend them at all times, and bound to wait for his money until it suits their convenience to pay him, which it very often never does. As "Medicus" truly remarks, "the impertinence of some people is most astonishing." Let us as a body try to put it down.

I am, Sir, yours truly,

Manchester, September, 1874. ANOTHER MEDICUS.

DR. MEYNERT.

THIS distinguished psychiatrist has declined the proffered Chair of Medico-Psychology and the superintendence of the Lunatic Asylum at Zürich, and remains at Vienna. We have ground for stating that his motives are purely patriotic, Austria being in more need of a good lecturer on mental pathology than Switzerland. There is no truth in the announcement that the principle of re-election every six years for the chair and every three years for the asylum—a regulation established by the democratic party at Zürich—was so objectionable to Meynert as to make him decline the invitation. It may be true, however, that Nothnagel, who was invited to fill the chair of Clinical Medicine at Zürich, had the same aversion for the principle of re-election every six years, and left the field open to Prof. Huguenin, who accordingly succeeded to the vacant post.

Mr. Richard King, (Rugby.)—We regret our inability to publish the communication.

MORTALITY AFTER CHILDBIRTH.

To the Editor of THE LANCET.

SIR,—With reference to the correspondence in your columns on the above subject I would venture to make a few observations.

It appears to me that to arrive at correct and definite conclusions concerning this mortality, it would be better to divide the tables into three heads.

First, those deaths which are immediately due to the parturient act. In this class would be placed deaths immediately ensuing either from placenta prævia, accidental hæmorrhage, uterine rupture, shock, &c. &c.

Secondly, those cases in which death takes place as a secondary consequence, such as by peritonitis arising from instrumental delivery or the result of a long lingering labour, pelvic cellulitis, or septicæmia, its frequent sequela—in fact all those causes which have their origin primarily in parturition.

Thirdly, deaths that may occur from other causes, but may be indirectly referred to parturition. To this class may be referred cases of phthisis where death ensues, it may be, either days or weeks subsequent to delivery. Also all those cases of independent origin which may be in progress at the time of the parturient act, or else that make their appearance during the convalescent stage. Doubtless in both instances the lowering of the general system which is incident to childbirth may conduce, either at the time or subsequently, to increase the severity of the incidental complaint, and so indirectly cause death; but it is doubtful if we can always distinctly trace the fatal result to this cause.

In tabulating cases of death, therefore, we might be led to erroneous conclusions if all causes of death were ranked under one head, and by so doing much valuable information would be lost to the physician; whereas by classing mortality from childbirth under the three heads specified we arrive at clearer deductions, and obtain more valuable data.

In conclusion, I beg to add my list, though not a very large one—viz., 1161 cases.

The death under the first head was No. 873 on the list, and was due to shock in a case of placenta prævia rather than to any great hæmorrhage.

The next two should be placed under the second head, and were respectively cases 71 and 1019. The first was a primipara; convulsion at seventh month; delivery; good progress towards recovery, but death on the eighth day from diarrhœa. The second was also a primipara, the lady being young and delicate; presentation, footling. A few days after delivery pelvic cellulitis set in, with formation of pus, which, however, never came to the surface, and she died on the twenty-second day from septicæmia.

Under the third head I have no deaths to record.

I was called in to a fatal case of accidental hæmorrhage at the seventh month; but it was not a case of my own, and therefore not included in the above.

Between the first and second death I recorded 802 cases, and altogether the mortality is very nearly 1 in 400.

I am, Sir, yours, &c.,

Liverpool, Sept. 1874. ARTHUR WIGLESWORTH, L.R.C.P.L., &c.

F. G., (Northampton.)—The Conversations Lexicon, of which a new edition is in course of publication by Brockhaus, of Leipzig. This is the best of encyclopædias. The staff of contributors includes some of the ablest scholars and *savans* of Europe. It is especially strong in its medical articles—Professor Graefe, of Halle, furnishing that on the Eye; Hagen, of Leipzig, that on Laryngology, Rhinology, and the Ear; Professor Pettenkofer, that on Cholera; and Dr. Trübiger, of Leipzig, that on Medicine. It is published in monthly parts, two of which have already appeared, at a moderate price.

J. F. G.—Hansard's, Great Queen-street.

TRANSFUSION AT THE GERMAN HOSPITAL.

To the Editor of THE LANCET.

SIR,—In your number for September 26th, 1874, I find a notice of a case of transfusion performed at the German Hospital. Will you kindly allow me to make a little correction. Your notice says: "The blood was obtained from the carotid artery of a lamb, and injected into the patient's cephalic vein." I beg to state that the blood was not injected (in the common acceptation of the word), but really and directly transfused by the aid of two silver canules and an india-rubber tube. This is, as far as I know, the first operation of this kind performed in this country in the present century. Of direct transfusion from the lamb there are in this country only three cases on record. The first one was performed by Lower and King, *experimenti causa*, on the 23rd of November, 1667, on a poor, but perfectly healthy man, Arthur Coga, who received one guinea for allowing it; the second, on the 12th of December, 1667, by King alone on the same man, both times without hurting him; the third, by Russel in the year 1792, on a boy, who had been taken ill with hydrophobia. The boy was saved, whilst at the same time and at the same place (Eye, in Suffolk) twenty other persons died from that disease.

In Germany direct transfusion from the lamb is coming into fashion just now, and has already proved a most powerful remedy in very different diseases.

I am, Sir, yours truly,

C. FARRE, M.D.,

Dalston, Sept. 30th, 1874. Resident Medical Officer, German Hospital.

AFFECTIONS OF THE FALLOPIAN TUBES.

M. SEUVRE makes the following statement in a recent thesis:—"I have examined during the last twelvemonth forty females who died of various diseases, and observed that the Fallopian tubes were often the seat of divers affections, the ovaries being perfectly sound." The author considers that the inflammation of the tubes is pretty frequent, and that this condition may give rise to hæmatocele. He also points out that intra-uterine injections, usually harmless, may become very perilous when the tubes are out of order. The latter, when inflamed, secrete muco-purulent matter; and if at that time an injection is thrown into the cavity of the womb with a certain force, a few drops of pus may be driven into the peritoneal cavity. It is, however, well known that the contraction of the tubes has much more effect in the direction of the uterus than towards the abdomen. M. Seuvre's post-mortem examinations are certainly of much interest, and may prove of great help to the students of uterine pathology.

Medicus.—The business of trafficking in "foreign degrees" is most reprehensible, and should be suppressed. It is a satisfaction to know that such "degrees" are now utterly worthless in this country.

BABY-FARMING AND UNQUALIFIED ASSISTANTS (YROVIL).

WE hope to notice this case next week.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—I shall feel much obliged if you can afford space for what follows. A physician, who was in good practice at Sidmouth, aged about sixty-five, was obliged to retire on account of spasmodic asthma, and was so fortunate as to gain one of the Epsom College medical pensions. He has a wife, aged seventy, and four unmarried daughters. Their present income is £35 per annum, and a cottage to live in. At his death the wife will be next to penniless. The object of this appeal is to induce any benevolent medical men who may read this to subscribe towards the purchase of an annuity for the wife, and thus aid both.

Subscriptions will be gladly received by Lady Symonds, Sunny Hill, Torquay, and applied as proposed.—Your humble servant,

October, 1874. PRESTWOOD M. SYMONDS.

J. H. B. (Southampton) should apply to the Military Secretary of the India Office, and to the Director-General of the Army Medical Service, 6, Whitehall-yard, for the information.

EASY-GOING CORONERS.

WE have lately said that nothing is doing so much to lower the coroner's office in public estimation as the unwise way in which the coroners themselves treat the questions of life and death which they are called on to investigate. In the interest of the office and its reputation, it is well to expose instances. The following is one well reported from the *Barrow Daily Times*:—

"A coroner's jury was summoned yesterday at the Derby Arms Hotel, Barrow, before Mr. Poole, the coroner, to inquire into the circumstances attending the death of Mr. James Emery. The deceased was employed as an assistant manager at the Iron Works; and from inquiries it appeared that at seven o'clock on the morning of the 28th he went to his work in his usual health, and did not complain to anyone of being ill until he was found by Samuel Barnes kneeling by some pig iron in the vicinity of the furnaces. Barnes assisted him into the cabin, and left him there; but upon returning in about two hours found that he was dead. He had in his possession a bottle of some liquid which had the appearance and smell of ketchup, and the deceased told Barnes that he had drunk some of it. The coroner said there was no doubt that the deceased died suddenly; but there was the fact that before he died he had complained of being ill, and under these circumstances he did not think it necessary to hold an inquest. The jury was therefore dismissed."

This is a very bad specimen of coroner's work, which treats the jury and the life of the poor man with very scant respect. The cause of death remains a mystery. It may have been poisonous mushrooms or any other poison. But because the poor man in the very act of dying had some feeling of not being well, the jury was dismissed, and their inquiry dispensed with!

A MEDICAL REGISTER FOR AMERICA.

A VOLUME of much importance has appeared lately in the shape of the Medical Register and Directory of the United States. This is the first work of the kind that has ever appeared on the other side of the Atlantic. It contains over 60,000 names, addresses, and qualifications, and, moreover, gives a brief sketch of each State, with an abstract of its laws, its schools, institutions, and other information of special or general interest. As a first attempt, with a task of such magnitude, the editors, Drs. Toner, Butler, and Brinton, and the publishers, Messrs. Baillière, Tindall, and Cox, are to be congratulated upon an undoubted success.

Mr. W. Bowser.—We have no means of ascertaining the gentleman's present address.

Spes.—We cannot decide the point in the absence of evidence.

PRURITUS VAGINÆ.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "S. S.," in last week's LANCET, may I suggest that the following lotion be tried:—Solution of diacetate of lead, one drachm; dilute hydrocyanic acid, one drachm; water, twelve ounces. The parts to well bathed with the lotion twice or thrice daily, but more especially on going to bed. I have had at various times several similar cases to treat, and have generally found them yield to this mode of treatment.

I am, Sir, yours obediently,

Bristol Lunatic Asylum, Stapleton, Oct. 6th, 1874. RUDER DRAPER.

THE DIVISION OF MIDWIFERY FEES.

A Constant Subscriber was called to attend the midwifery patient of another practitioner, who was not at hand. He attended, and was offered the fee, but in a brotherly spirit declined it, and referred the case to the gentleman who had been engaged. He writes to us a fortnight after the above occurrence to say he has received neither money nor thanks. We prefer the idea of medical men acting for each other without payment. But the rule of the place must decide whether he is to receive half the fee or thanks. In no place, however, that we know is it the rule for a medical man who has acted as our correspondent has done, to receive neither thanks nor half the fee. He has the satisfaction of having acted well. Should there be no recognition of his kindness, he will not feel bound to act similarly in future. We are not required to cast pearls before unappreciating eyes.

Mr. P. N. P. Betts, (Ashby-de-la-Zouch.)—The work by Dr. Moore, published by Churchill; or the Guide for Anglo-Indians, by Dr. Mair, published by King and Co., Cornhill.

A QUERY.

To the Editor of THE LANCET.

SIR,—In order to obtain the Provincial Licence of Canada, or to be enabled legally to collect fees in that colony, what steps must a physician, surgeon, and accoucheur, duly registered under our Medical Act, take, if setting up in practice in Canada? Yours &c.,

October 3rd, 1874. COLONIST.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Rutherford; Dr. Henry Bennet, London; Dr. Barnes, London; Dr. Hughes Bennett, Edinburgh; Dr. Henderson, Shanghai; Mr. Gant, London; Dr. Goden, New York; Mr. Gordon Brown, London; Dr. Menzies, Naples; Dr. Barr, Northampton; Mr. E. A. Smith, London; Mr. H. Casson, Frodlingham; Mr. Andrew, Moseley; Dr. Percy Leslie, London; Mr. Nugent, Dublin; Dr. E. Garland, Yeovil; Mr. Moore, London; Dr. Barnes, Birkenhead; Mr. Bowser, Framlingham; Dr. Jay, Scarborough; Dr. Vans Best, Aberdeen; Mr. Ashton, King's Lynn; Mr. Bellis, Wootton; Mr. R. Draper, Stapleton; Dr. Duncan; Mr. Lakin, Leicester; Dr. Sedgwick Saunders, London; Mr. Flannagan, Houghton-le-Spring; Mr. Cheyne, London; Mr. Symonds; Dr. C. F. Moore, Dublin; Mr. Betts, Ashby-de-la-Zouch; Dr. Dawson, Long Eaton; Mr. J. B. Sim; Mr. Wraith; Dr. Kingdon; Mr. Groves, London; Mr. Mackenzie, London; Mr. Wilson, Dorking; Surgeon-Major Furnell, Madras; Mr. Anderson, Glasgow; Mr. Ellis, Newcastle; Mr. Kirby, Dublin; Mr. Diver, Kenley; Mr. Eales, London; Dr. Spencer Cobbold, London; Mr. Nunn, London; Mr. Shaw, Bristol; Mr. Hunter, Glasgow; Dr. Mitchinson, Lincoln; Dr. Fox; Dr. Walker, Liverpool; Dr. Greene, London; Mr. F. Ree, London; Dr. Richards, London; Mr. Stedman, Leatherhead; Mr. Symes, Dumfries; Mr. Morgan, Manchester; Messrs. Richardson and Co., Leicester; Mr. Thorne, Jersey; Dr. Sturges, London; Mr. Hobson, London; Mrs. Stannard, Chesterfield; Mr. Davies, Maesteg; Mr. Brookfield, Wolverhampton; Mr. A. K. Cook, Greenwich; Mr. Morgan, Neath; Mrs. Starky, Clewer; Mr. Proctor, Shiffnal; Mr. Jarmaen, Huddersfield; Dr. Stephens, Ilminster; Mr. Scott, Westray; Mr. Bunny, Dumfries; Dr. Taylor, Penrith; Mr. Stomers, London; Dr. Wollaston, Shrivenham; Mrs. Harris, Lendfield; Mr. Birt, Stourbridge; Dr. Faber, Dalston; Dr. Lowe, Lynn; Mr. Draper, Kensington; Mr. Jordon, Newcastle-on-Tyne; Mr. Bond, West Bromwich; Mr. Fox, Manchester; Dr. Brumwell, Burnley; Dr. Wright, Glasgow; Dr. Nattrass, Sunderland; Mr. King, Rugby; Mr. R. B. Knowles, London; Mr. Soper, Dartmouth; Dr. Ferrier, London; Mr. H. Rimpton, London; Dr. Fairweather, Gifford; Mr. Brend, Coleshill; Mr. Denne, Canterbury; Mr. Callant, Bridgnorth; Dr. Burges, Newton Abbott; Mr. Hordley, Stoke-on-Trent; Dr. Shanalan, Great Witley; Dr. Stewart, Blackburn; Dr. Bell, Preston; Dr. Munroe, Hull; Mr. Cousens, Lincoln; Mr. Mackay, Sunderland; The Secretary of the Statistical Society; Enquirer; M.D.; The Editor of the *Builders' Reporter*; House-Surgeon; J. H. B.; Nemo; E. W. W.; Aves; M.R.C.S.; A Constant Subscriber; R. L. D.; A Student; L.R.C.S.I.; L.M.; &c. &c.

LETTERS, each *with enclosure*, are also acknowledged from — Mr. Parker, Derby; Mr. Collins, Newnham; Miss Schofield, Dalston; Mr. G. Lawson, London; Mr. Banks, Edinburgh; Mr. Carruthers, Bishop Auckland; Dr. O'Connor, March; Mr. Nearne, Birchington; Mr. Johnstone, Alton; Mr. Sewell, Darlington; Mr. Wall, Wigan; Dr. Macpherson, Stromness; Dr. Fraser, Clitheroe; Mr. Hicks, Harrold; Mr. Bellingham, Dudley; Mr. Williams, Oxford; Mr. Corns, Oldham; Mr. Mills, Cirencester; Dr. Rowell, Leeds; Dr. Balbirnie, Sheffield; Mr. May, Stoke-on-Trent; Mr. Crew, Whitstable; Mr. Bircham, Winchester; Mr. Williams, Towyn; Dr. Wrangham, Wragby; Mr. Dawson, Brentwood; Mr. Pope, Tring; Dr. Muscroft, Pontefract; Mr. Thomson, Higham Ferrers; Mr. Keeling, Sheffield; Mr. Dempsey, Oldbury; Mr. Roe, Bridgnorth; Dr. Stokoe, Peckham-rye; Dr. Morris, Frampton; Dr. Blasson, Edgeware; Mr. Nugent, Monkstown; Mr. Stoneham, Horsforth; Mr. Barlow, Dalston; Mr. Tolb, Dumfries; Mr. Griffith, St. Helens; Mr. Bell, Lewisham; Mr. Field, Gosport; Ophthalmoscope; Medicus, Swansea; Delta, Bristol.

East London Observer, Navy, Colonies, Huddersfield Chronicle, Newcastle Daily Chronicle, Surrey Advertiser, Hampshire Telegraph, Manchester Courier, Sussex Coast Mercury, Manchester Guardian, Cork Constitution, Blackburn Patriot, Sheffield Independent, Waterford News, Manchester City Press, Glasgow Herald, Animal World, Isle of Man Times, and *County Express* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, OCT. 8TH, 1874.

Date.		Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Oct.	2	29·55	S.W.	51	53	...	60	45	0·53	Raining
,,	3	29·40	W.	45	47	...	60	40	0·21	Fine
,,	5	29·26	W.	42	45	...	67	37	0·34	Cloudy
,,	6	30·05	S.W.	45	49	...	57	36	...	Overcast
,,	7	29·39	W S W	55	56	...	58	44	0·22	Raining
,,	8	29·96	WNW	43	44	...	56	38	0·40	Fine

Medical Diary for the ensuing Week.

Monday, Oct. 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ST. PETER'S HOSPITAL. — 3 P.M. Expected Operations: Lithotrity and External Urethrotomy.

Tuesday, Oct. 13.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY. — 8½ P.M. Surgeon A. Hall, R.A., "On the Treatment of Cholera by the Subcutaneous Injection of Chloral Hydrate." — Dr. Bakewell: "Aneurism of Abdominal Aorta of unusual size."

Wednesday, Oct. 14.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M., and on Thursday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Oct. 15.

ST. GEORGE'S HOSPITAL.—Operations 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY OF LONDON. — 8 P.M. Mr. Henry Power, "On Purulent Ophthalmia."

Friday, Oct. 16.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
MEDICAL MICROSCOPICAL SOCIETY.—8 P.M. Opening Meeting of the Session.

Saturday, Oct. 17.

HOSPITAL FOR WOMEN Soho-square.—Operations, 9½ A.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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